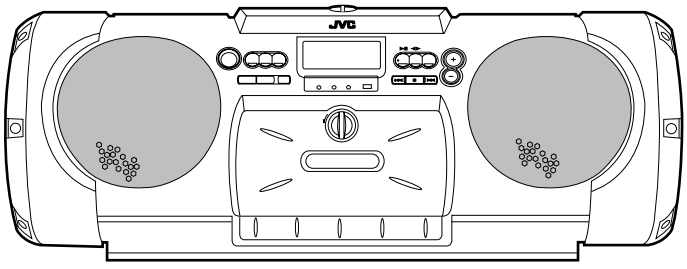
JVC

SERVICE MANUAL

CD PORTABLE SYSTEM

RV-B550BU



COMPACT disc DIGITAL AUDIO

Area Suffix
UY ..... Argentina

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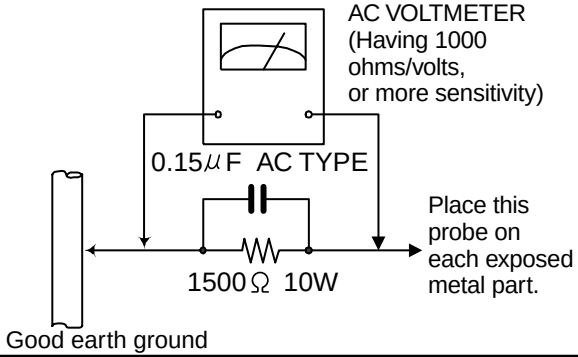
No.20826C
Jan. 2001

Safety precautions

1. This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer`s warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage current check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet , particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.)
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).

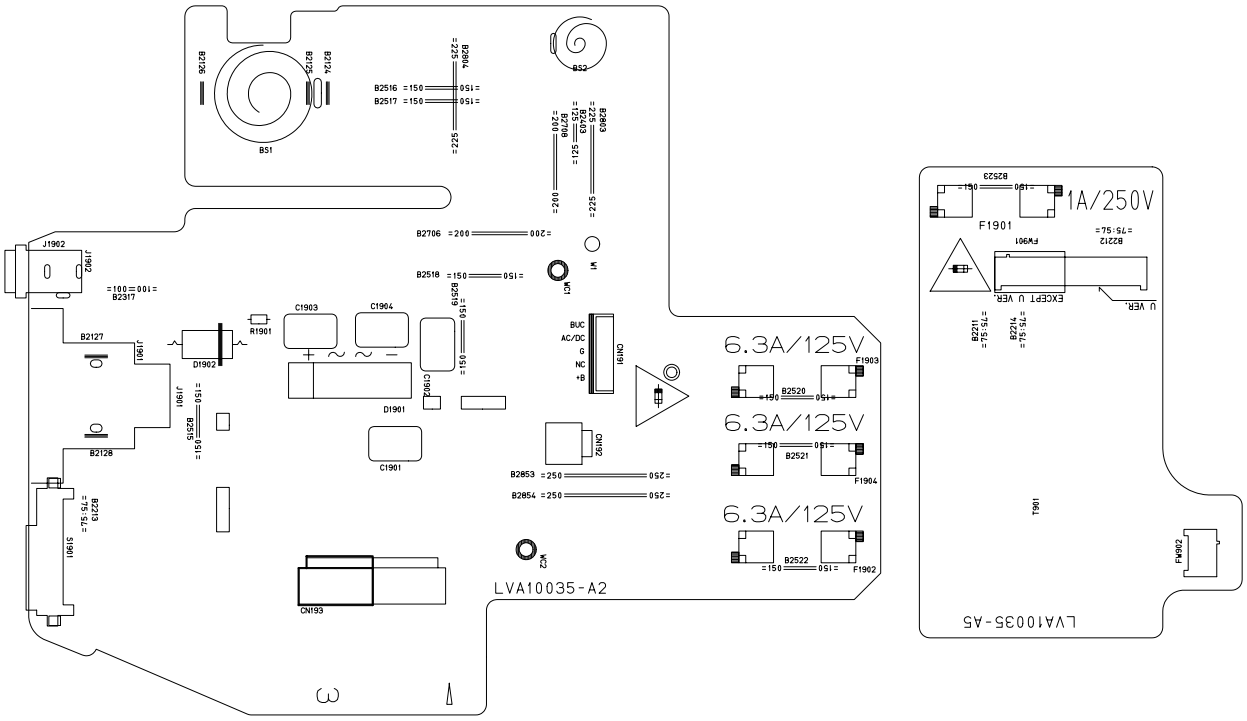


Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

⚠ ***CAUTION*** **Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.**

Importance administering point on the safety



Note : It's means "J" for U.S.A. and Canada market model.

RV-B550J ONLY	RV-B550J SEULEMENT
Full Fuse Replacement Marking	**Marquage Pour Le Remplacement Complet De Fusible**
Graphic symbol mark (This symbol means fast blow type fuse.)	Le symbole graphique (Ce symbole signifie fusible de type á fusion rapide.)
should be read as follows ;	doit être interprété comme suit ;
FUSE CAUTION	**PRECAUTIONS SUR LES FUSIBLES**
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATING OF FUSES ; **F1901 : 1.0-A, 250-V** **F1902 : 6.3-A, 125-V** **F1903 : 6.3-A, 125-V** **F1904 : 6.3-A, 125-V**	**POUR UNE PROTECTION CONTINUE CONTRE DES RISQUES D'INCENDIE, REMPLACER SEULEMENT PAR UN FUSIBLE DU MEME TYPE ;** **F1901 : 1.0-A, 250-V** **F1902 : 6.3-A, 125-V** **F1903 : 6.3-A, 125-V** **F1904 : 6.3-A, 125-V**

Important for laser products

1.CLASS 1 LASER PRODUCT

2.DANGER : Invisible laser radiation when open and inter lock failed or defeated. Avoid direct exposure to beam.

3.CAUTION : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.

4.CAUTION : The compact disc player uses invisible laserradiation and is equipped with safety switches whichprevent emission of radiation when the drawer is open and the safety interlocks have failed or are de feated. It is dangerous to defeat the safety switches.

5.CAUTION : If safety switches malfunction, the laser is able to function.

6.CAUTION : Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

⚠ ***CAUTION*** **Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.**

VARNING : Osynlig laserstrålning är denna del är öppnad och spårren är urkopplad. Betrakta ej strålen.

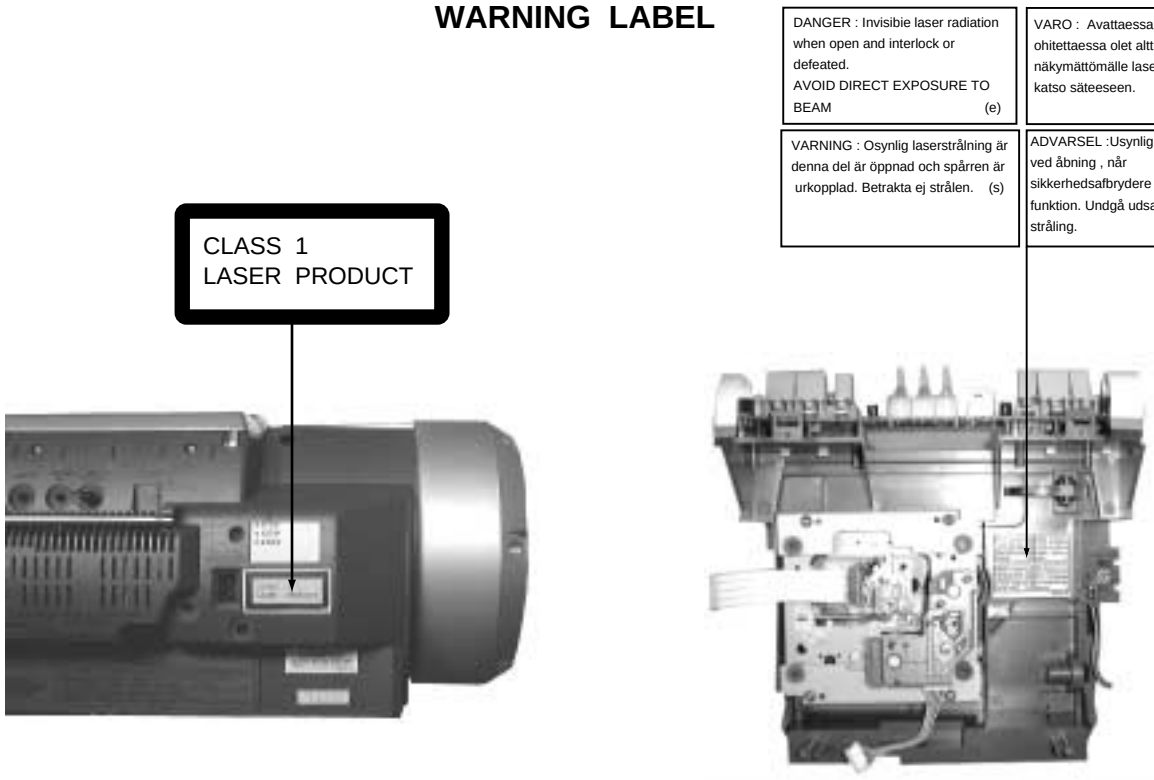
VARO : Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle.Älä katso säteeseen.

ADVARSEL : Usynlig laserstråling ved åbning , når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

ADVARSEL : Usynlig laserstråling ved åpning,når sikkerhetsbryteren er avslott. unngå utsettelse for stråling.

REPRODUCTION AND POSITION OF LABELS

WARNING LABEL


DANGER : Invisibie laser radiation when open and interlock or defeated.
AVOID DIRECT EXPOSURE TO BEAM (e)
VARO : Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle.Älä katso säteeseen. (d)
VARNING : Osynlig laserstrålning är denna del är öppnad och spårren är urkopplad. Betrakta ej strålen. (s)
ADVARSEL :Usynlig laserstråling ved åbning , når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling. (f)
CLASS 1
LASER PRODUCT

Preventing static electricity

1. Grounding to prevent damage by static electricity

Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

2. About the earth processing for the destruction prevention by static electricity

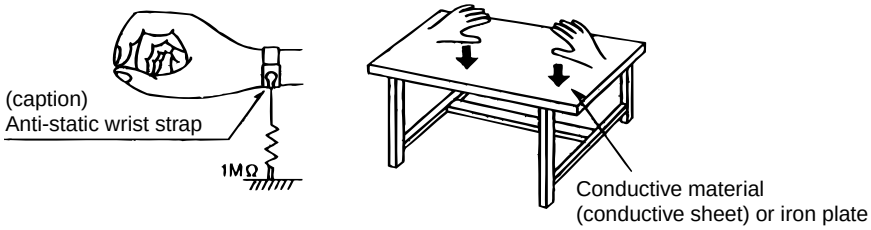
In the equipment which uses optical pick-up (laser diode), optical pick-up is destroyed by the static electricity of the work environment.
Be careful to use proper grounding in the area where repairs are being performed.

2-1 Ground the workbench

Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

2-2 Ground yourself

Use an anti-static wrist strap to release any static electricity built up in your body.



3. Handling the optical pickup

1. In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition. (Refer to the text.)

2. Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

4. Handling the traverse unit (optical pickup)

1. Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.

2. Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.

3. Handle the flexible cable carefully as it may break when subjected to strong force.

4. It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it

Attention when CD mecanism assembly is decomposed

***Please refer to "Disassembly method" in the text for pick-up and how to detach the CD mechanism.**

1. Remove CD mechanism assembly.
2. Remove the four screws on the microcomputer board.
3. Disconnect the connector CN907 and CN602 on the microcomputer board.
4. The microcomputer board is put up as shown in Fig.1.
5. Solder is put up before the card wire is removed from connector CN601 on the maicroconputer board as shown in Fig. 2.
   (When the wire is removed without putting up solder, the CD pick-up assembly might destroy.)
6. Please remove solder after connecting the card wire with CN601 when you install picking up in the substrate.

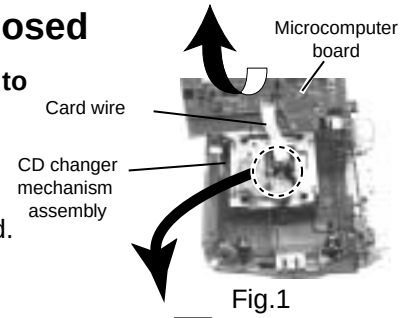


Fig.1

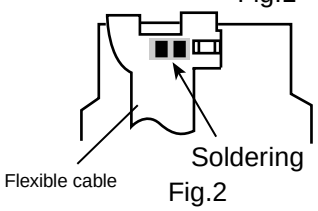


Fig.2

Disassembly method

<Main Body>

■ Removing the side grilles

(See Fig.1 and 2)

1. Remove the six screws **A** attaching the side grille on the left side of the body and pull out the side grille from the body.

2. Similarly, remove the side grille on the right side.

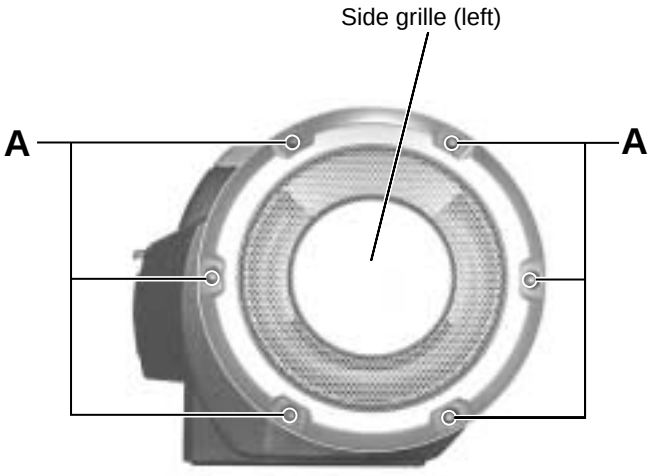


Fig.1

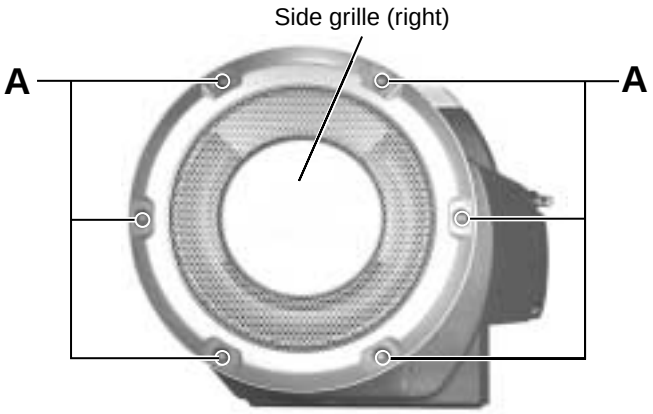


Fig.2

■ Removing the front cabinet assembly and the rear cabinet assembly (See Fig.3 and 3a)

- Prior to performing the following procedure, remove the right and left side grilles.

1. Remove the battery cover on the back of the body.

2. Remove the eight screws **B** on the back of the body and detach the front cabinet assembly and the rear cabinet assembly. Disconnect the connector CN904 on the LED (Illumination) board.

   Attention: When reassembling, make sure that connector CN633 on the rear cabinet is connected to the speaker terminal on the front cabinet.

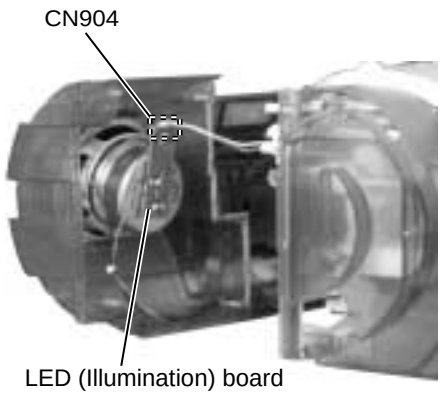


Fig.3a

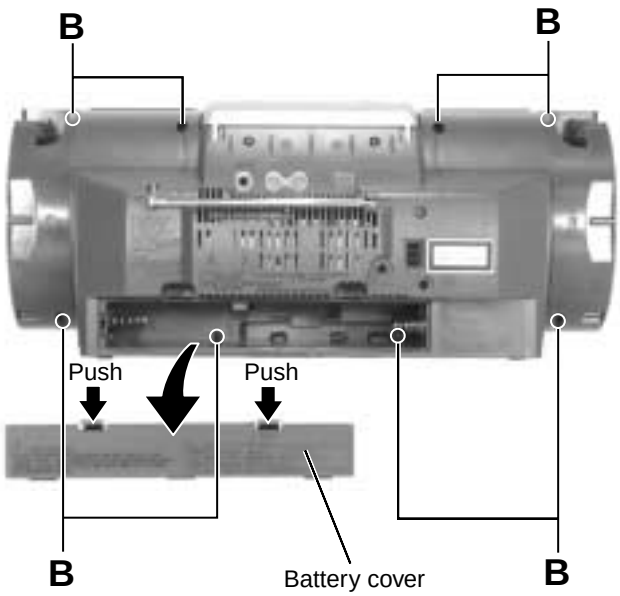


Fig.3

■Removing the cassette mechanism assembly (See Fig.4 and 5)

- Prior to performing the following procedure, remove the right and left side grilles and the front cabinet assembly.

1. Disconnect the card wires from connector CN405 and CN406 on the microcomputer board located on the underside of the CD unit of the rear cabinet assembly.

2. Remove the four screws **C** attaching head shield and the cassette mechanism assembly.

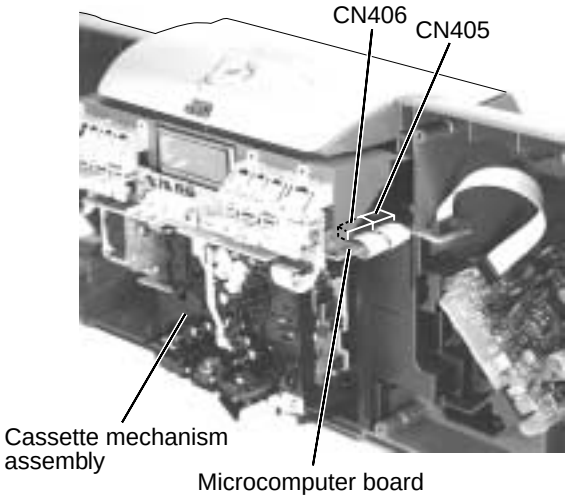


Fig.4

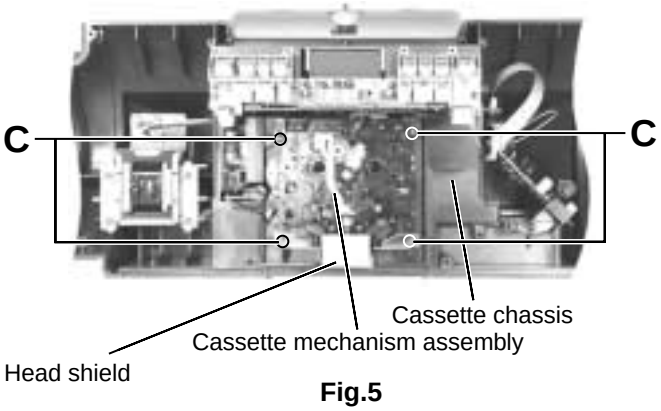


Fig.5

■Removing the CD unit assembly (See Fig.6 to 8)

※The CD unit assembly cannot be removed if the cassette mechanism assembly has not been removed.

- Prior to performing the following procedure, remove the right and left side grilles, the front cabinet assembly and the cassette mechanism assembly.

1. Remove the cassette chassis (See Fig.6).

2. Disconnect the card wires from connector CN631 and CN632 on the amplifier board.

3. Disconnect the card wires from connector CN403 on the microcomputer board.

4. Remove the two screws **D** attaching the CD mechanism assembly on the back of the rear cabinet (See Fig.8).

5. Pull out the CD unit assembly toward the front.

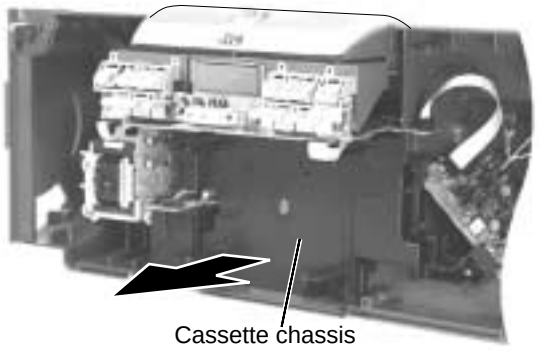


Fig.6

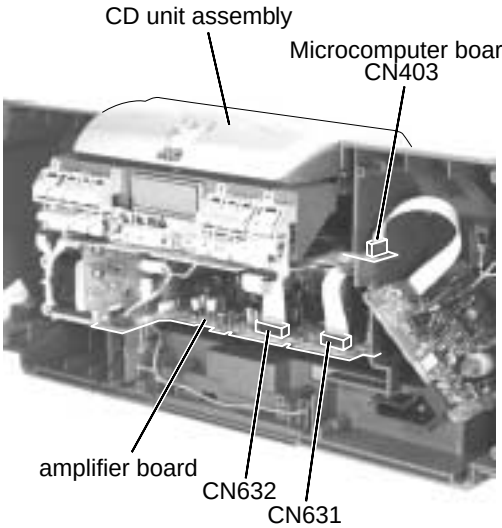


Fig.7

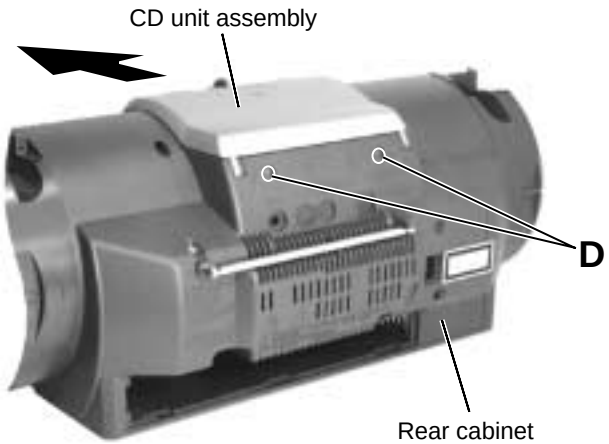


Fig.8

■ Removing the tuner board (See Fig.9)

- Prior to performing the following procedure, remove the right and left side grilles, the front cabinet assembly.

1. Disconnect the card wire from connector CN403 on the microcomputer board.

2. Remove the screw **E** attaching the tuner board holder and pull out the tuner board holder together with the tuner board. Disconnect the antenna wire from TP1.

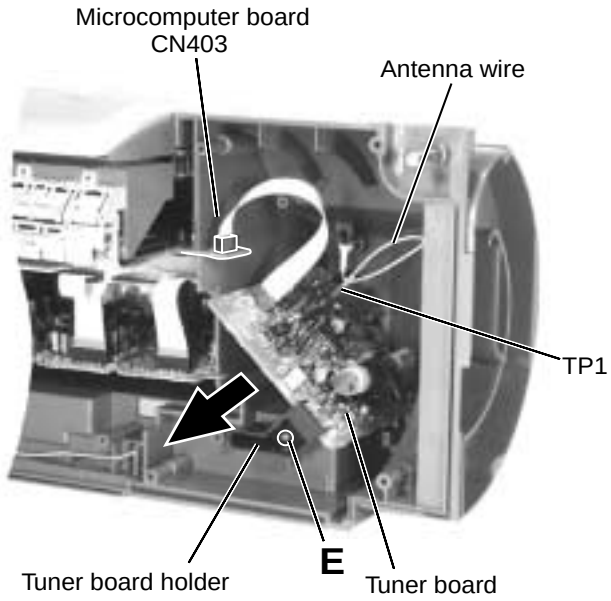


Fig.9

■ Remove the power transformer assembly (See Fig.10)

- Prior to performing the following procedure, remove the right and left side grilles, the front cabinet assembly, the cassette mechanism assembly and the cassette chassis.

1. Disconnect the harness from connector CN192 and CN193 on the power supply board respectively.

2. Remove the four screws **F** attaching the power transformer assembly.

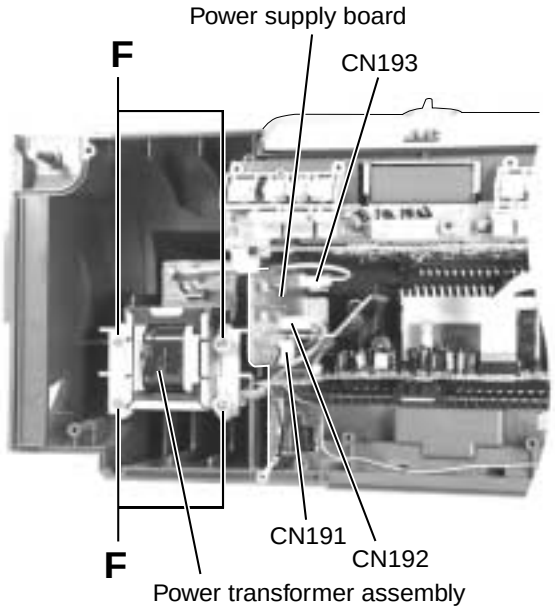


Fig.10

■ Remove the amplifier board, the power supply board and the battery board (See Fig.11)

- Prior to performing the following procedure, remove the right and left side grilles, the front cabinet assembly, the cassette mechanism assembly, the cassette chassis and the CD unit assembly.

1. Disconnect the 5pin harness from connector CN191 on the power supply board.

2. Remove the two screws **G** and the one screw **H** attaching the amplifier board.

3. Disconnect the harness from connector CN192 and CN193 on the power supply board respectively.

4. Remove the two screws **I** attaching the power supply board.

5. Pull out the battery board.

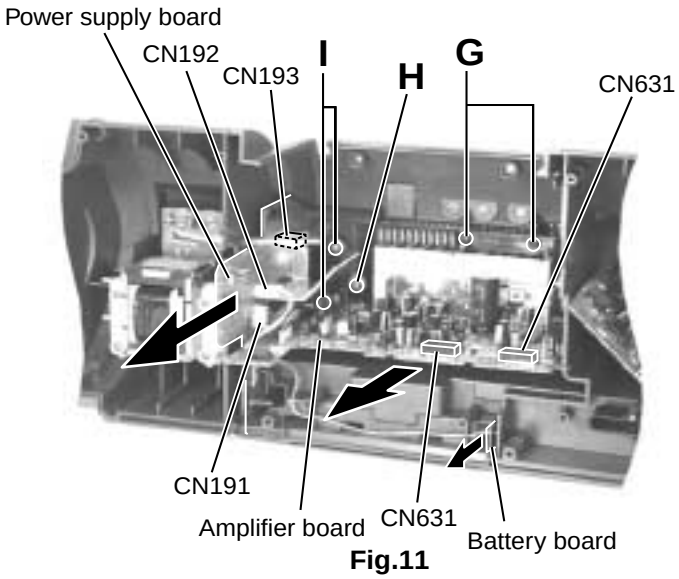


Fig.11

<CD unit assembly>

■Removing the microcomputer board

(See Fig.12 and 13)

1. Disconnect the card wire from connector CN251 and CN252 on the key switch board on the front side of the CD unit assembly.

2. Remove the four screws **J** attaching the microcomputer board on the underside of the CD unit assembly.

3. Disconnect the card wire or the harness from connector CN601, CN602 and CN907 on the microcomputer board respectively.

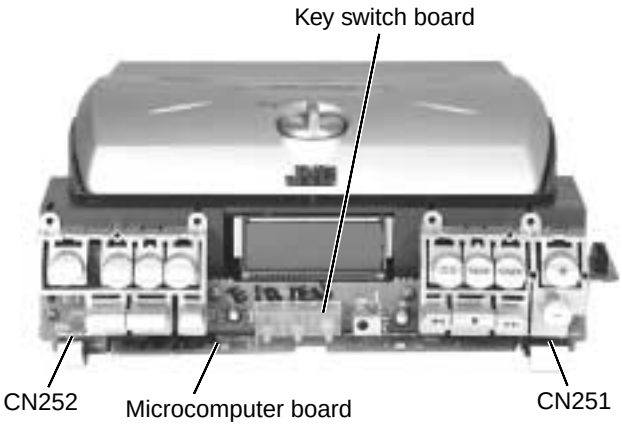


Fig.12

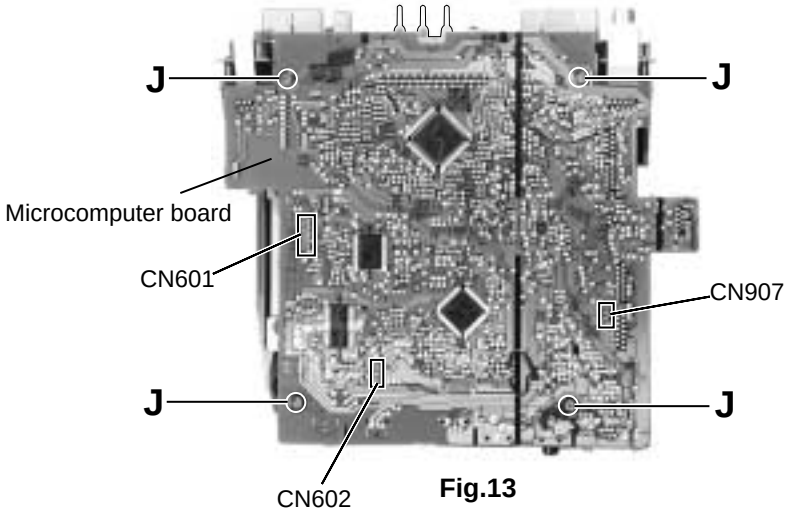


Fig.13

■Removing the key switch board

(See Fig.14 and 15)

- Prior to performing the following procedure, remove the microcomputer board.

1. Release the four tabs **a** fixing the right and left function buttons and the three tabs **b** by the key switch board.

   Push tabs **a** and **b** in the directions of the arrows carefully not to damage the function buttons

2. Remove the six screws **K** attaching the key switch board.

3. Pull out the key switch board from two tabs **c**.

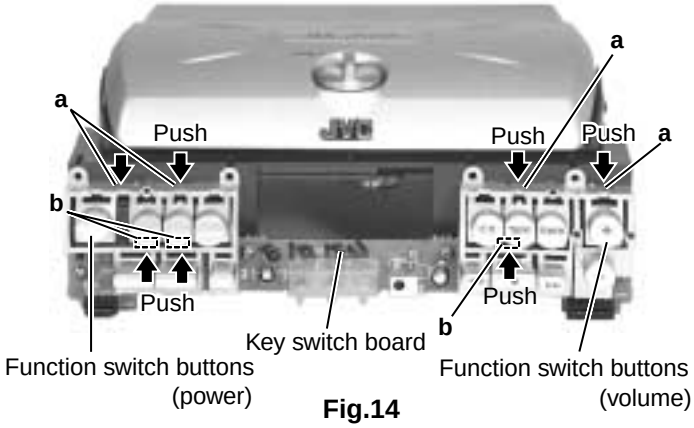


Fig.14

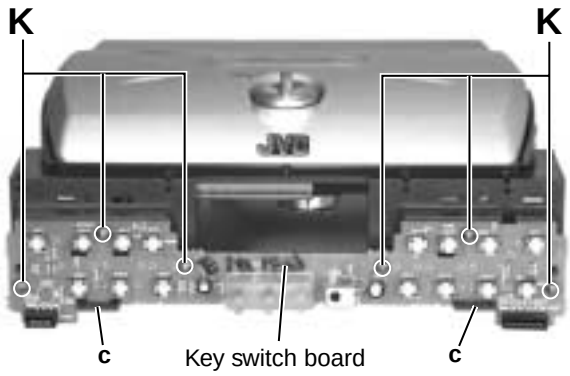


Fig.15

■Removing the CD door switch board

(See Fig.16)

- Prior to performing the following procedure, remove the microcomputer board.

1. Release the two tabs **d** fixing the CD door switch board on the back of the CD unit assembly.

■Removing the CD mechanism assembly

(See Fig.16)

- Prior to performing the following procedure, remove the microcomputer board.

1. Remove the four screws **L** attaching the CD mechanism holder on the back of the CD unit assembly.
2. Remove the CD mechanism holder, the CD cushion and the CD mechanism assembly respectively.

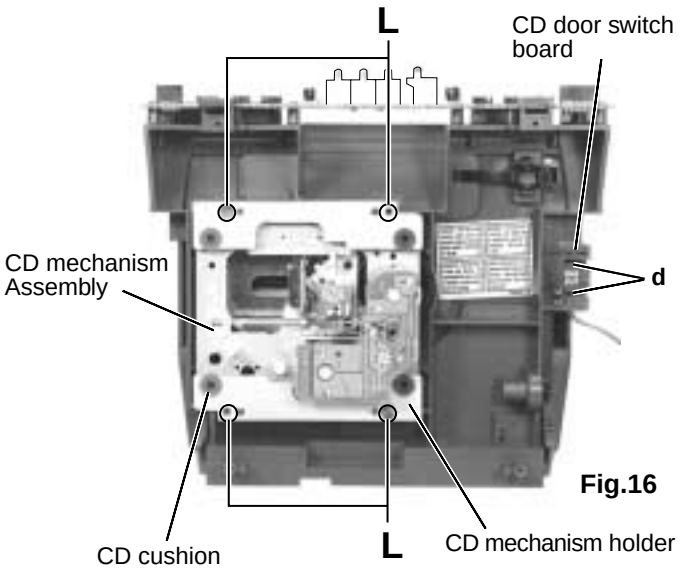


Fig.16

■Removing the pickup assembly

(See Fig.17 to 19)

- Prior to performing the following procedure, remove the CD mechanism assembly.

1. Remove the four screws **M** attaching the pickup cover.
2. Push the shaft stopper by the turn table in the direction of the arrow and pull out the shaft. The pickup assembly comes off.

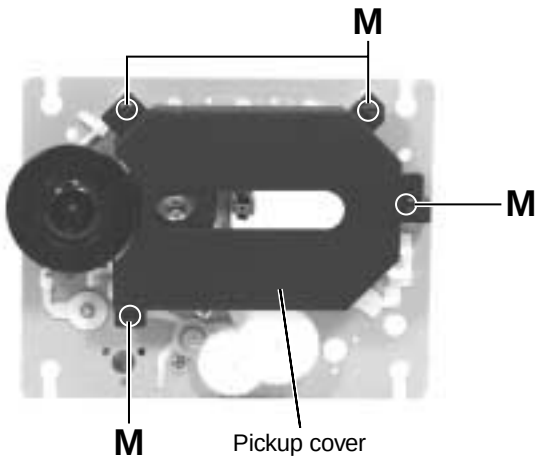


Fig.17

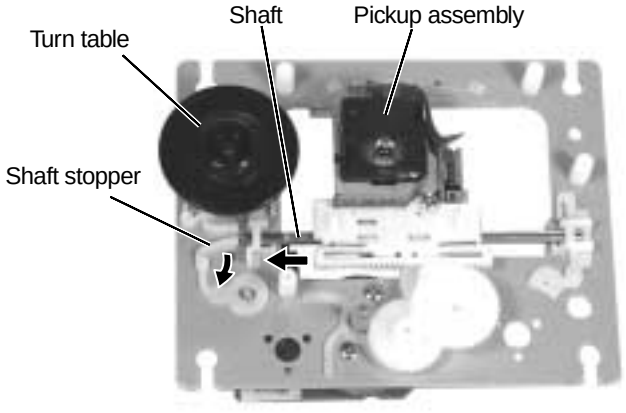


Fig.18

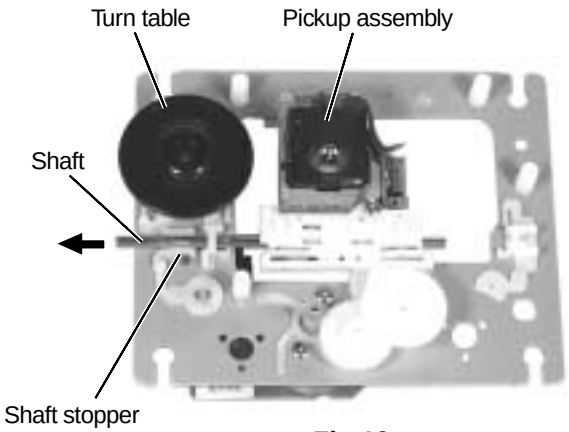


Fig.19

<Front Cabinet Assembly>

■ Removing the LED boards (See Fig.20)

- Prior to performing the following procedure, remove the front cabinet assembly and the rear cabinet assembly.

1. Remove the two screws **N** and two screws **O** attaching the LED boards on the speaker.

2. Disconnect the harness from connector FW251 and FW261.

■ Removing the speakers (See Fig.20)

- Prior to performing the following procedure, remove the front cabinet assembly and the rear cabinet assembly.

1. Remove the eight screws **P** attaching the right and left speakers on the inside of the front cabinet assembly.

2. Remove the screw **Q** attaching the speaker terminal.

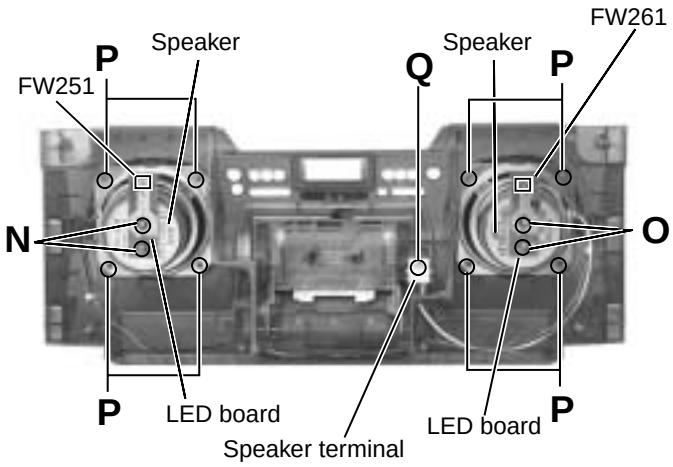


Fig.20

<<Cassette mechanism section>>

■ Removing the playback/recording & eraser head (See Figs. 1 and 2)

1. While shifting the trigger arms seen on the right side of the head mount in the arrow direction, turn the flywheel R in counterclockwise direction until the head mount has gone out with a click (See Fig. 1).
2. When the flywheel R is rotated in counterclockwise direction, the playback/recording & eraser head will be turned in counterclockwise direction from the position in Fig. 2 to that in Fig. 3.
3. At this position, disconnect the flexible P.C. board (outgoing from the playback/recording & eraser head) from the connector CN31 on the head amplifier & mechanism control P.C. board.
4. After dismounting the FPC holder, remove the flexible P.C. board.
5. Remove the flexible P.C. board from the chassis base.
6. Remove the spring **a** from behind the playback/recording & eraser head.
7. Loosen the reversing azimuth screw retaining the playback /recording & eraser head.
8. Take out the playback/recording & eraser head from the front of the head mount.
9. The playback/recoring & eraser head should also be removed similarly according to Steps 1 ~ 8 above.

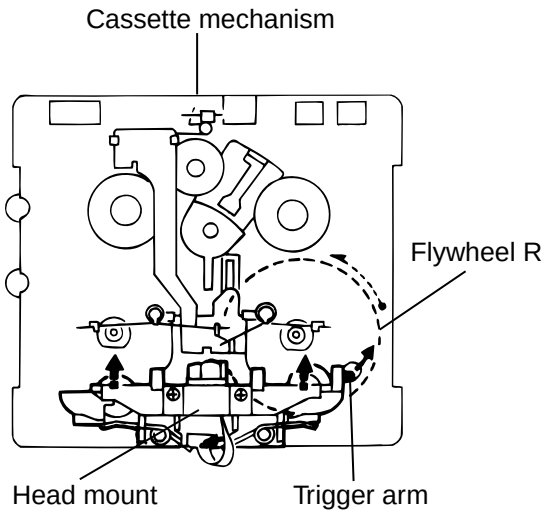


Fig. 1

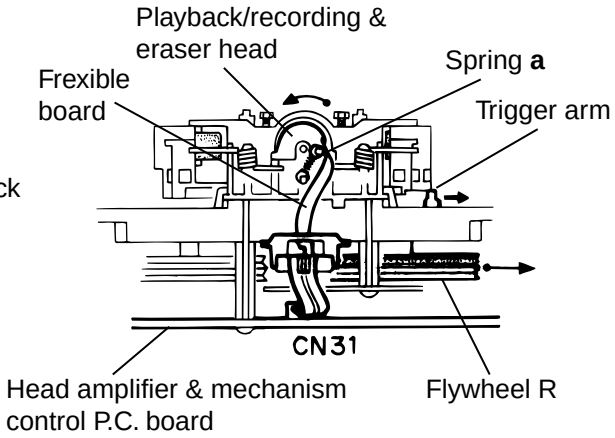


Fig. 2

■ Reassembling the playback/recording & eraser head

1. Reassemble the playback head from the front of the head mount to the position as shown in Fig. 3.
2. Fix the reversing azimuth screw.
3. Set the spring **a** from behind the Playback/Recording & Eraser head.
4. Attach the flexible P.C. board to the chassis base, and fix it with the FPC holder as shown in Fig. 3.
5. The playback/recording & eraser head should also be reassembled similarly to Step 1 ~ 4 above.

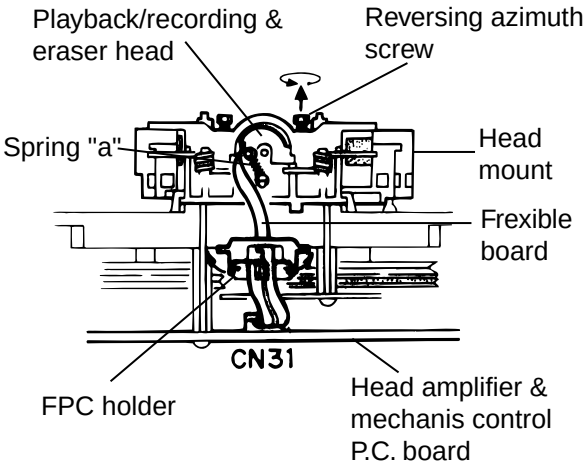


Fig. 3

■ Removing the head amplifier & mechanism control P.C. board (See Fig. 4)

1. Remove the cassette mechanism assembly.
2. After turning over th cassette mechanism assembly, remove the three screws **A** retaining the head amplifier & mechanism control P.C. board.
3. Disconnect the connector CN32 on the P.C. board including the connector CN 1 on the reel pulse P.C. board.
4. When necessary, remove the 4 pin parallel wire soldered to the main motor.

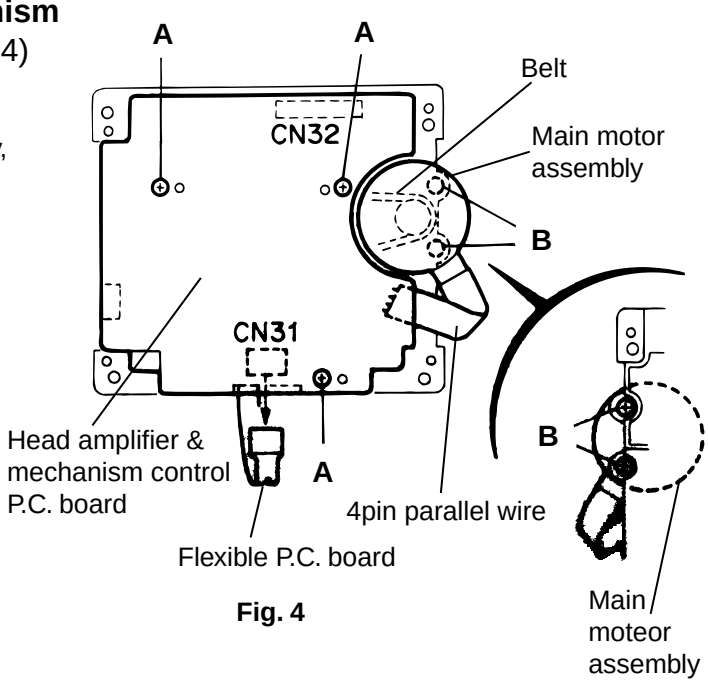


Fig. 4

■ Removing the main motor assembly (See Fig. 4~6)

1. Remove the two screws **B** retaining the main motor assembly (See Fig. 4, 4a).
2. While raising the main motor, remove the capstan belt from the motor pulley (See Fig. 4a).

   Caution 1: Be sure to handle the capstan belt so carefully that this belt will not be stained by grease and other foreign matter. Moreover, this belt should be hanged while referring to the capstan belt hanging method in Fig. 5, 6.

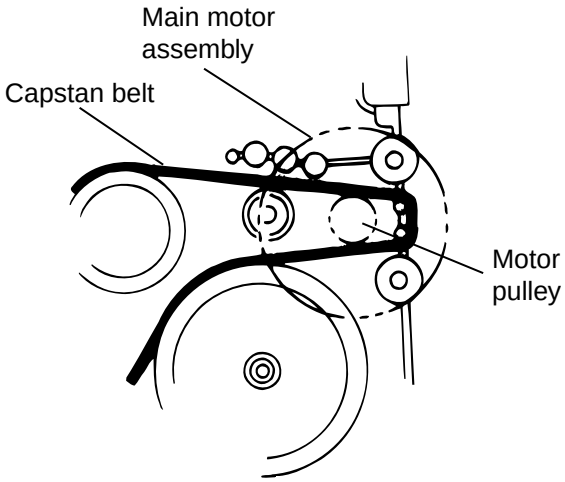


Fig. 4a

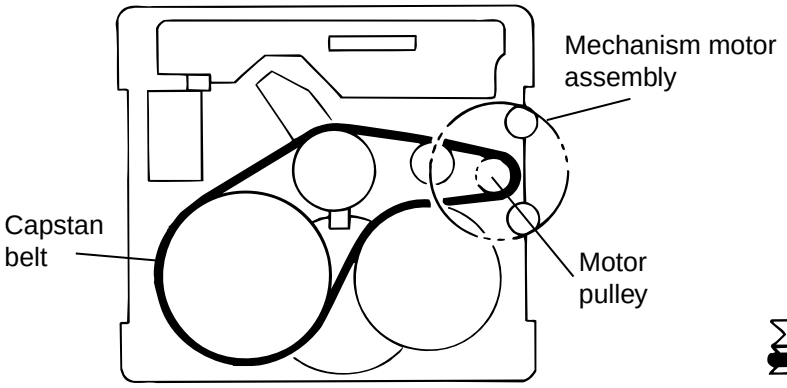


Fig. 5

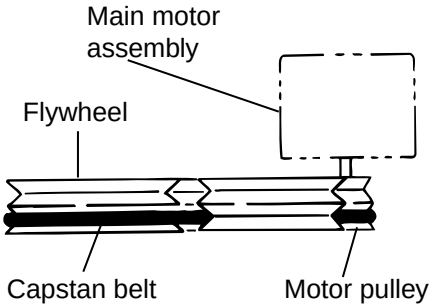


Fig. 6

■ Removing the flywheel

(See Figs. 7 and 8)

1. Remove the head amplifier & mechanism control P.C. board.
2. Remove the main motor assembly.
3. After turning over the cassette mechanism, remove the slit washers **b** and **c** fixing the capstan shafts R and L, and pull out the flywheel R and L respectively from behind the cassette mechanism.

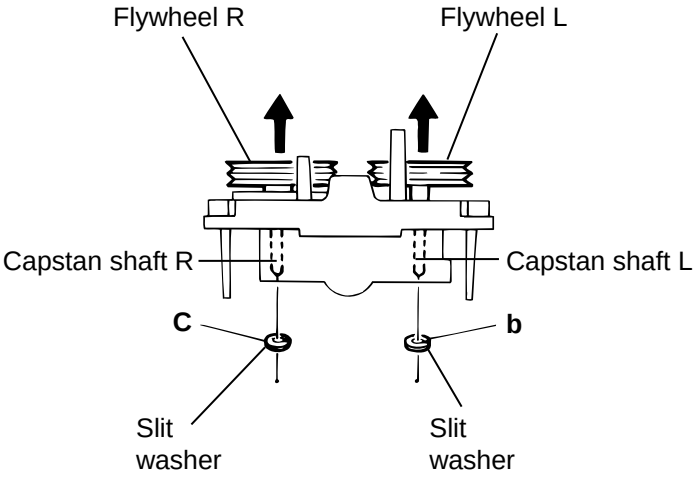


Fig.7

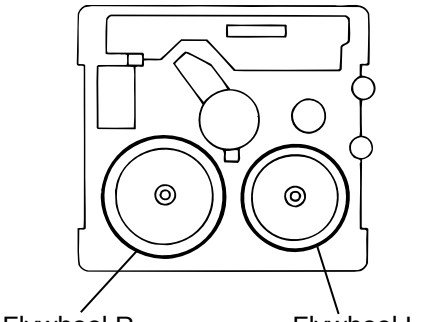


Fig. 8

■ Removing the reel pulse P.C. board and solenoid

(See Fig. 9)

1. Remove the five pawls **d**~**h** and screw **C** reataining the reel pulse P.C. board.
2. From the surface of the reel pulse P.C. board parts, remove the two pawls **i** and **j** retaining the solenoid.

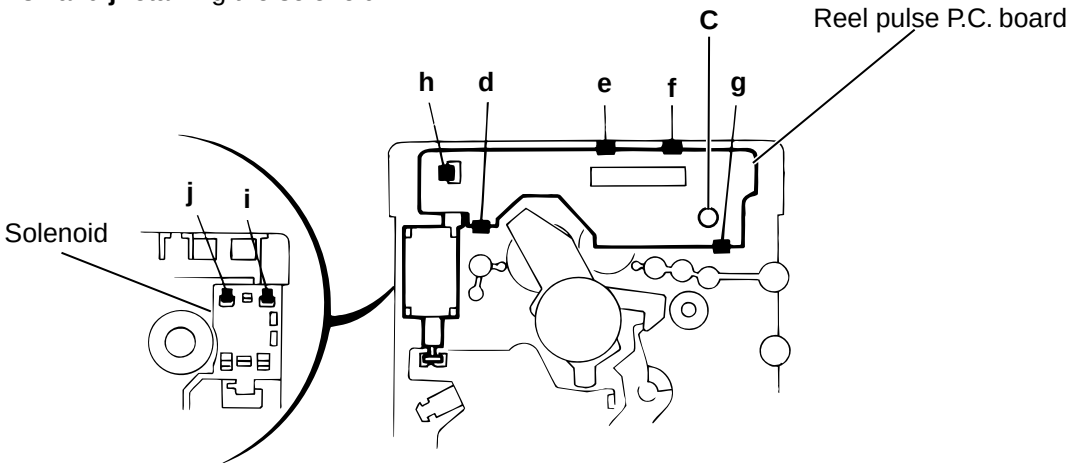


Fig. 9

Adjustment method

■ Measuring devices necessary for adjustment

1. Low-frequency oscillator
   It must have the ability to output 600ohm from 0 dBs at an oscillation frequency of 20 Hz − 50 Hz.

2.Attenuator impedance: 600ohm

3.Electronic voltmeter

4.Distortion meter

5.Frequency counter

6.Wow and flutter meter

7.Test tapes
   VT-712: tape speed and rotational distortion (3 kHz)
   VT-724: standard level (1 kHz)
   VT-703: head angle adjustment (10 kHz),
   or use VT-73
   VT-739: reproduction of frequency characteristics
   (1 kHz, 63 Hz, 10 kHz)

8.Blank tape
   Type I : AC-225 (TDK-AD)
   Type II : AC-514 (TDK-SA)

9.Torque gauge: Tension gauge for playback,
   fast-forward and rewind.
   FWD (TW211A), REW (TW212A)
   and FF/REW (TW2231A)

■ Specifications for measurement

Power supply voltage ..... AC 100 V (50/60 Hz)
Standard output ..... Speaker: 0.775V/4ohm
Headphone:0.245V/32ohm
Standard frequency and input level
..... 1 kHz: AUX: -8 dBs
Input level for reproduction of recording characteristics
..... AUX: -28 dBs
Measuring output terminal ..... Speaker: CN633
Load resistance 4ohm

■ Radio input signal

AM frequency ..... 400 Hz
Degree of modulation in AM band 30%
FM frequency ..... 400 Hz
Frequency deviation in FM band ..... 22.5 kHz

■ Tuner section

Voltage input to the tuner ..... +B: DC 5.7 V
VT: DC 12 V
Standard measuring output ..... 26.1 mV (0.28 V) /3ohm

Input locations ..... AM: standard loop antenna
FM: TP1 (hot) and TP2 (GND)

■ Standard settings for measuring volume

Sound ..... OFF
Effective hyper bass ..... OFF
Volume adjustment ..... VOL. 23

Precautions for measuring

1.Input 30 pF and 33 kohm to the IF sweeper output and 0.082 μF and 100 kohm to the sweeper input, respectively.

2.Lower the output level of the IF sweeper as much as possible in the adjustable range.

3.The IF sweeper needs no adjustment as it is a fixed component.

4.It is not necessary to perform any kind of adjustment on the MPX, as a ceramic oscillator is used for measuring.

5.FM tracking adjustment is not necessary as a fixed coil is used.

6.The grounding circuit is separate from the input and output. Therefore, be sure to connect to ground carefully when measuring both the input and output voltages simultaneously using 2 channels of the electronic voltmeter.

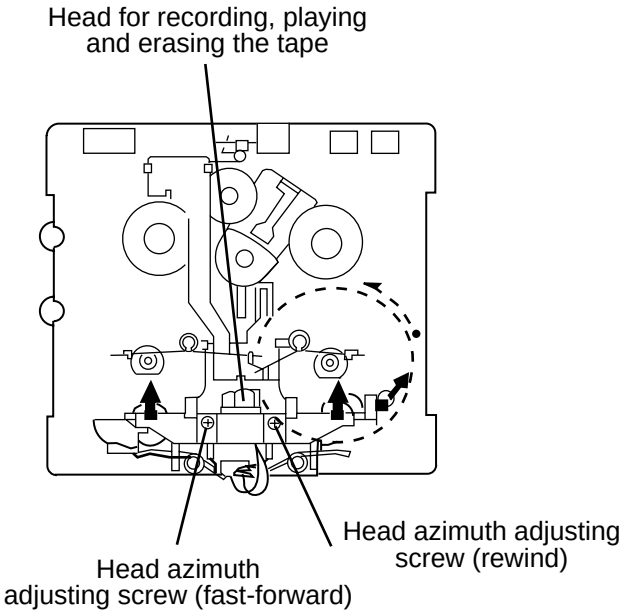
7.The speaker's minus terminal cannot be connected to ground when using a BTL format amplifier. Therefore, do not connect any type of ground wire to this terminal. The OTL format is used with this system.

8.Use a large wire to connect to the dummy impedance generator when measuring the output.

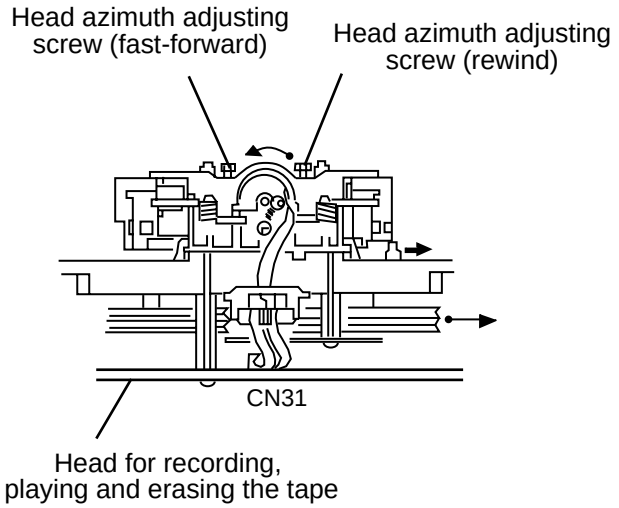
9.Be sure to use a band pass filter (DV-12) when using mixed tape.

Location of parts to be adjusted

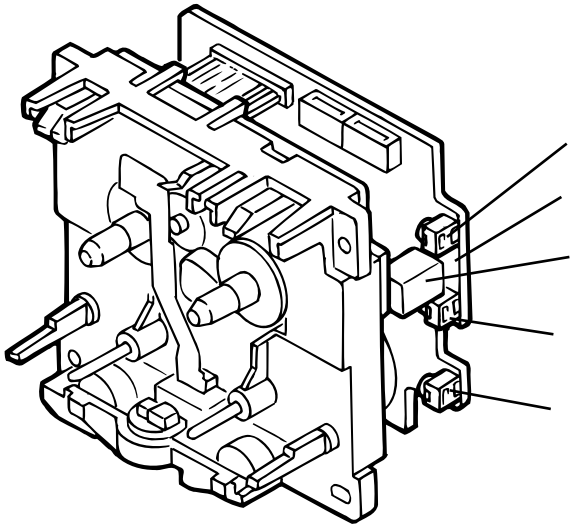
■Cassette handling mechanism


Head for recording, playing and erasing the tape
Head azimuth adjusting screw (rewind)
Head azimuth adjusting screw (fast-forward)

■Cassette handling mechanism (reverse side)


Head azimuth adjusting screw (fast-forward)
Head azimuth adjusting screw (rewind)
CN31
Head for recording, playing and erasing the tape

■Location of parts to be adjusted



VR37
Motor speed

TP
Bias oscillation frequency (wide pattern)

L301
Bias oscillation frequency

VR31
Lch recording frequency (bias adjustment)

VR32
Rch recording frequency (bias adjustment)

■ Adjustment of cassette handling mechanism

Items	Condition	Method for adjustment and confirmation	Standard value	Parts to be adjusted
Confirmation of head angle	Test tape: VT-703 (10 kHz) Measuring output terminal: Speaker terminal, speaker (R) (Load resistance: 4Ω), headphone terminal	(1) Play back the VT-703 test tape. (2) Adjust the head azimuth screws so that the tape playback mechanism records the maximum output level in both the fast-forward and rewind direction. (3) In all cases, both the fast-forward and rewind direction should be adjusted using head azimuth screws.	Maximum output	Adjust the head azimuth screws when changing the head.
Confirmation of tape speed	Test tape: VT-712 (3 kHz) Measuring output terminal: Headphone terminal	Adjust VR37 so that the frequency counter records 3,015 Hz ±15 Hz when playing back the end of the VT-712 test tape (3 kHz) in the fast-forward direction.	Tape speed of cassette deck: 3,015 Hz ± 15 Hz	VR37

■ Items to be confirmed and standard values

Items	Condition	Method for adjustment and confirmation	Standard value	Parts to be adjusted
Difference in speed between fast-forward and rewind	Test tape: VT-712 (3 kHz) Measuring output terminal: Speaker terminal, speaker (R) (Load resistance: 4), headphone terminal	The difference between fast-forward and rewind should be less than 60 Hz on the frequency counter when playing back the beginning of the VT-712 test tape (3 kHz) in both directions.	Less than 60 Hz	Should be confirmed when changing the motor.
Wow and flutter	Test tape: VT-712 (3 kHz) Measuring output terminal: Headphone terminal	Wow and flutter should be recorded at less than 0.25% (WRMS) when playing back the VT-712 test tape (3 kHz) in the fast-forward direction.	Less than 0.25% (WRMS)	

■ Electronic performance

Items	Condition	Method for adjustment and confirmation	Standard value	Parts to be adjusted
Confirmation of output	Measuring output terminal: CN34-5 or 7-terminal preamp base Test tape: VT-724	Confirm that the output from the CN34-5 or 7-terminal preamp base connector is -25 dBs ± 3 dB when playing back the VT-724 test tape. Reference value: The output from the headphone terminal is -7 dB ± 4 dB.	Output of CN34-5 terminal: -25 dBs ± 3 dB Difference between Lch and Rch: within 3 dB	
Confirmation of reproduction of frequency characteristics	Measuring output terminal: Headphone terminal Test tape: VT-739	Confirm that the 10 kHz reproduction level is -1 dB ± 5 dB compared to the 1 kHz reproduction level when playing back the VT-739 test tape.	Difference between 10 kHz and 1 kHz should be -1 dB ± 5 dB.	
Recording bias frequency	Fast-forward or rewind direction: Test tape: TYPE II (AC-514) Measuring terminal: Bias TP on the base	Switch the bias (beat cut switch) between 1 and 2 to confirm that the frequency changes. Load the test tape (AC-514 for TYPE II) into the mechanism and preset it to the record-pause mode. Confirm that the bias TP frequency on the base is 100 kHz ± 6 kHz.	100 kHz ± 6 kHz	

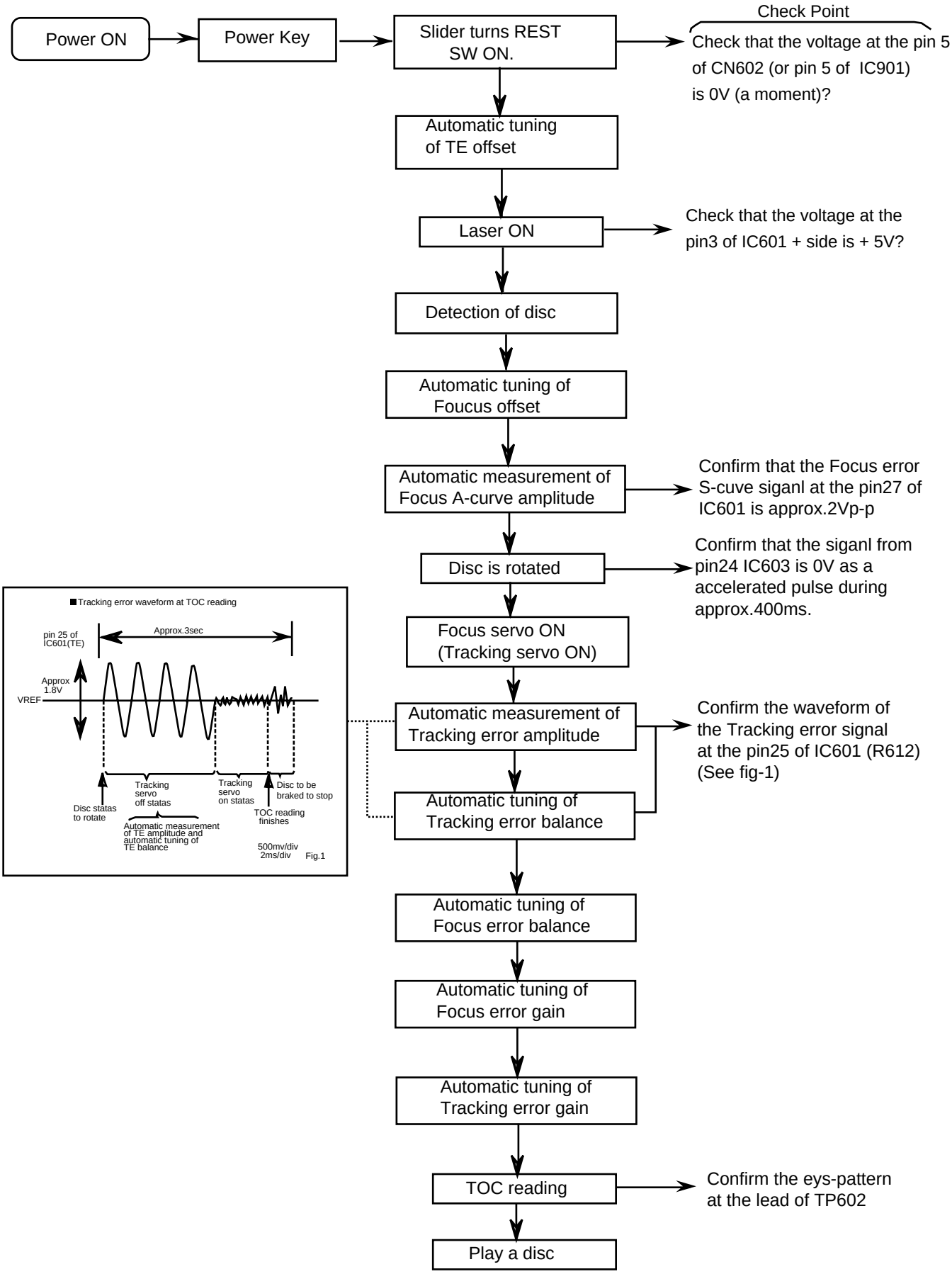
■ Standard values for confirmation of electronic performance

Items	Condition	Method for adjustment and confirmation	Standard value	Parts to be adjusted
Erasing current (standard and reference value)	Fast-forward and rewind direction: ▪ Recording mode ▪ AC-514 for TYPE II, AC-225 for TYPE I Measuring terminal: Both erase head ter minals	Load the test tape (AC-514 for TYPE II, AC-225 for TYPE I) into the tape playback mechanism and preset it to the record-pause mode. After setting it to the recording mode, send 1 M in series to the erase head and measure the erasing current from both erase head terminals.	TYPE II: 110 mA TYPE I: 75 mA	
Adjustment of reproduction of frequency characteristics	Standard frequencies: 1 kHz and 10 kHz (REF: -20 dB) Test tape: TYPE II: AC-514 Measuring input terminal: OSC IN	Load the test tape (AC-514 for TYPE II, AC-225 for TYPE I) into the tape playback mechanism and preset it to the record-pause mode. Input the standard value of -20 dB and the standard frequencies of 1 kHz and 10 kHz repeatedly to the microphone input from the transmitter in the recording mode. Adjust VR31 for Lch and VR32 for Rch so that the difference in level between 10 kHz and 1 kHz is -1 dB ± 5 dB. Repeat the above for TYPE I and confirm that the difference in level is -XdB ± dB.	Difference in output between 1 kHz and 10 kHz: -1 dB ± 5 dB	Lch: VR31 Rch: VR32

(U version only)

Sensitivity of reproduction of microphone mixing	Microphone input terminal: 1 kHz, -65 dB Test tape: VT-724	Based on the reproduction level of the VT-724 test tape, confirm that the microphone level is 0 dBs ± 3 dB when a 1 kHz, 65 dBs signal is input. (The mixing volume and sound volume should be at maximum.)	0 dBs ± 3 dB (Based on the reproduction level of the VT-724)	

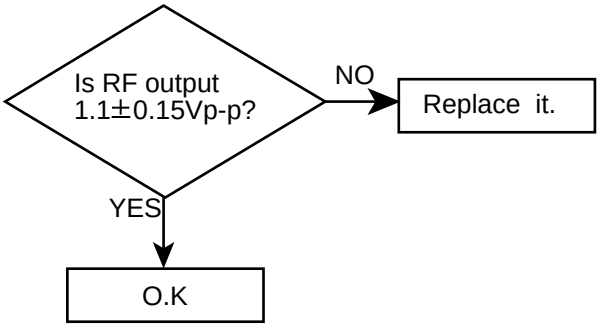
Flow of functional operation until TOC read


Power ON
Power Key
Slider turns REST SW ON.
Check Point
Check that the voltage at the pin 5 of CN602 (or pin 5 of IC901) is 0V (a moment)?
Automatic tuning of TE offset
Laser ON
Check that the voltage at the pin3 of IC601 + side is + 5V?
Detection of disc
Automatic tuning of Foucus offset
Automatic measurement of Focus A-curve amplitude
Confirm that the Focus error S-cuve siganl at the pin27 of IC601 is approx.2Vp-p
Disc is rotated
Confirm that the siganl from pin24 IC603 is 0V as a accelerated pulse during approx.400ms.
Focus servo ON (Tracking servo ON)
Automatic measurement of Tracking error amplitude
Confirm the waveform of the Tracking error signal at the pin25 of IC601 (R612) (See fig-1)
Automatic tuning of Tracking error balance
Automatic tuning of Focus error balance
Automatic tuning of Focus error gain
Automatic tuning of Tracking error gain
TOC reading
Confirm the eys-pattern at the lead of TP602
Play a disc
■Tracking error waveform at TOC reading
pin 25 of IC601(TE)
Approx.3sec
Approx 1.8V
VREF
Disc statas to rotate
Tracking servo off statas
Automatic measurement of TE amplitude and automatic tuning of TE balance
Tracking servo on statas
TOC reading finishes
Disc to be braked to stop
500mv/div
2ms/div
Fig.1

Maintenance of laser pickup

(1) Cleaning the pick up lens
Befor you replace the pick up, please try to clean the lens with a alcohol soaked cotton swab.

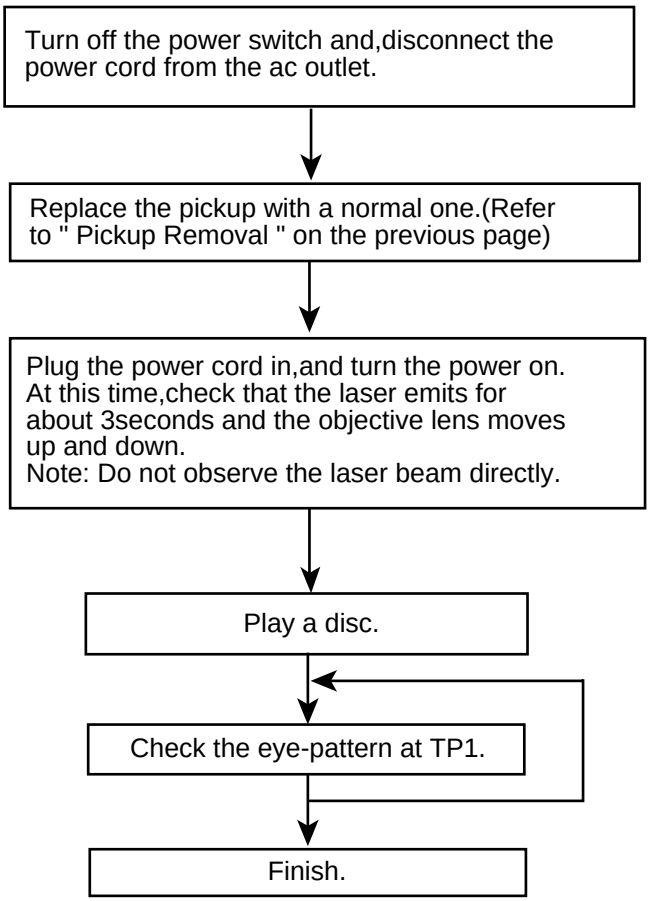
(2) Life of the laser diode (Fig.1)
When the life of the laser diode has expired, the following symptoms wil appear.
(1) The level of RF output (EFM output:amplitude of eye pattern) will below.



(Fig.1)

(3) Semi-fixed resistor on the APC PC board
The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power.Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.
If the laser power is lower than the specified value,the laser diode is almost worn out, and the laser pickup should be replaced.
If the semi-fixed resistor is adjusted while the pickup is functioning normally,the laser pickup may be damaged due to excessive current.

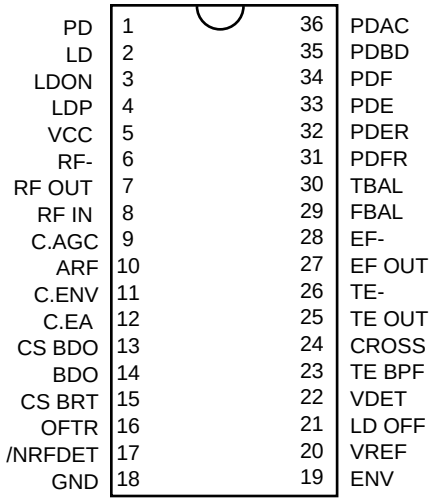
Replacement of laser pickup


Turn off the power switch and,disconnect the power cord from the ac outlet.
Replace the pickup with a normal one.(Refer to " Pickup Removal " on the previous page)
Plug the power cord in,and turn the power on.
At this time,check that the laser emits for about 3seconds and the objective lens moves up and down.
Note: Do not observe the laser beam directly.
Play a disc.
Check the eye-pattern at TP1.
Finish.

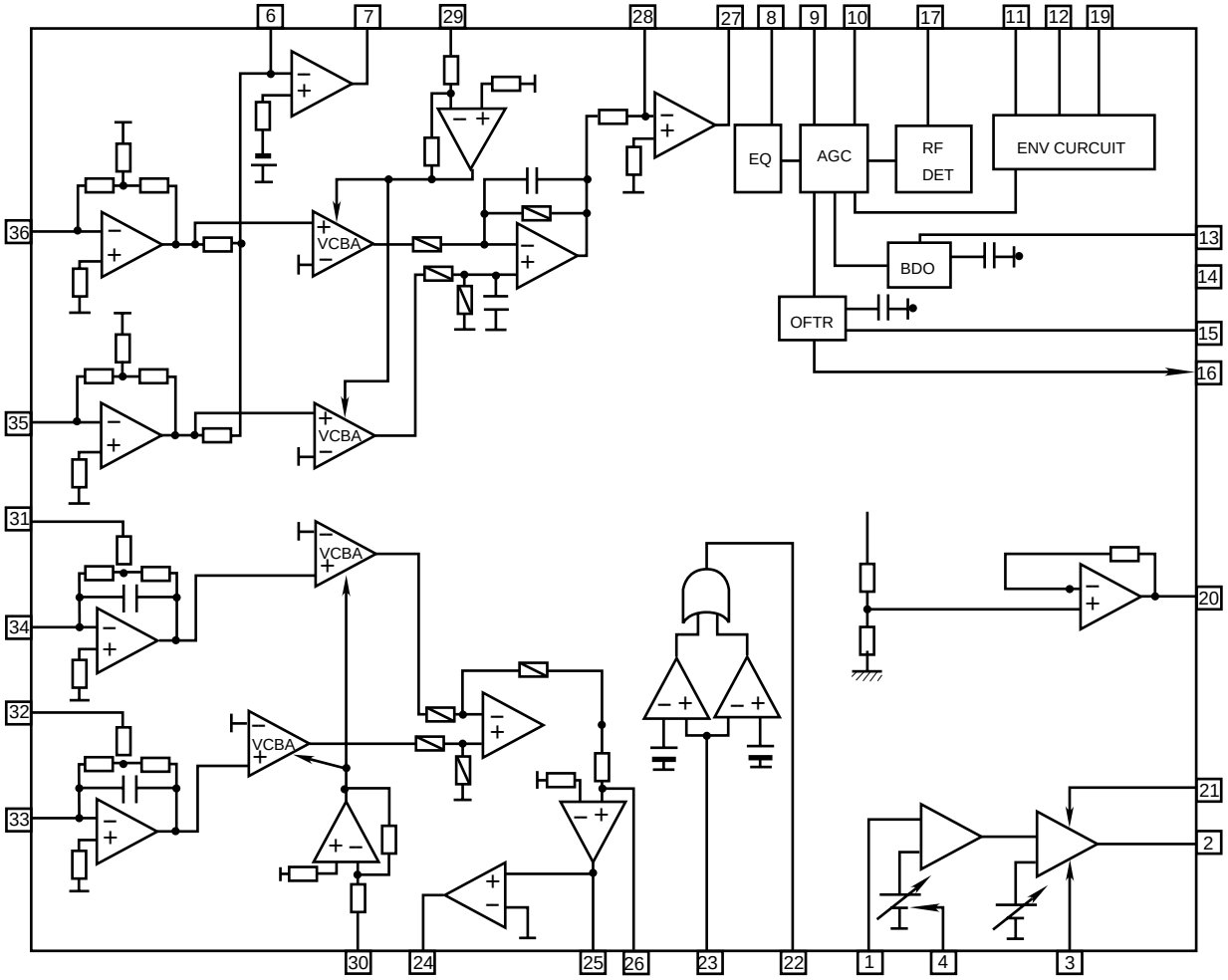
Description of major ICs

■ AN8806SB (IC601) : RF&Servo AMP

1.Terminal Layout



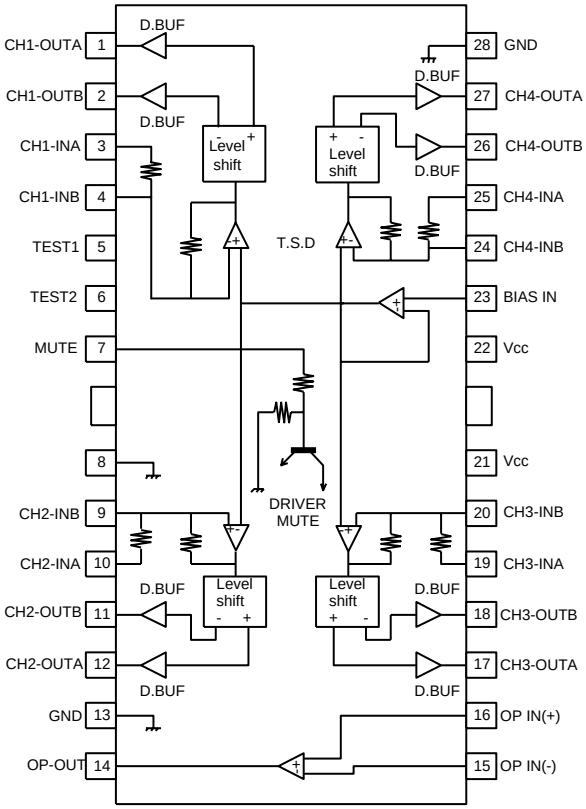
2.Block Diagram



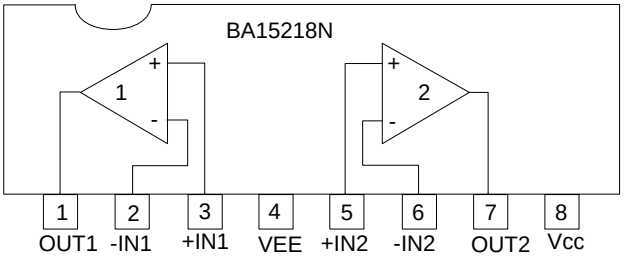
3. Functions

Pin No.	Symbol	I/O	Functions and operations
1	PD	I	APC amp input terminal
2	LD	O	APC amp output terminal
3	LD ON	I	APC ON/OFF control terminal
4	LDP	--	Connect to ground
5	VCC	--	Power supply
6	RF-	I	Inverse input pin for RF amp
7	RF OUT	O	RFamp output
8	RF IN	I	RF input
9	C.AGC	I/O	Connecting pin of AGC loop filter
10	ARF	O	RF output
11	C.ENV	I/O	A capacitor is connected to this terminal to detect the envelope of RF signal
12	C.EA	I/O	A capacitor is connected to this terminal to detect the envelope of RF signal
13	CS BDO	I/O	A capacitor is connected to detect the lower envelope of RF signal
14	BDO	O	BDO output pin
15	CS BRT	I/O	A capacitor is connected to detect the lower envelope of RF signal
16	OFTR	O	Of-track status signal output
17	/NRFDET	O	RF detection signal output
18	GND	--	Ground
19	ENV	O	Envelope output
20	VREF	O	Reference voltage output
21	LD OFF	--	Connect to ground
22	VDET	O	Vibration detection signal output
23	TE BPF	I	Input pin of tracking error through BPF
24	CROSS	O	Tracking error cross output
25	TE OUT	O	Tracking error signal output
26	TE-	I	Inverse input pin for tracking error amp
27	FE OUT	O	Output pin of focus error
28	FE-	I	Inverse input pin for focus error amp
29	FBAL	I	Focus balance control
30	TBAL	I	Tracking balance control
31	PDFR	I/O	F I-V amp gain control
32	PDER	I/O	E I-V amp gain control
33	PDF	I	I-V amp input
34	PDE	I	I-V amp input
35	PD BD	I	I-V amp input
36	PD AC	I	I-V amp input

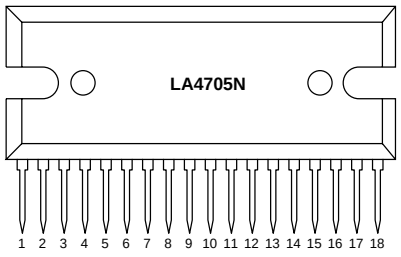
■ BA6897FP-W (IC602) : 4channel driver

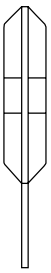


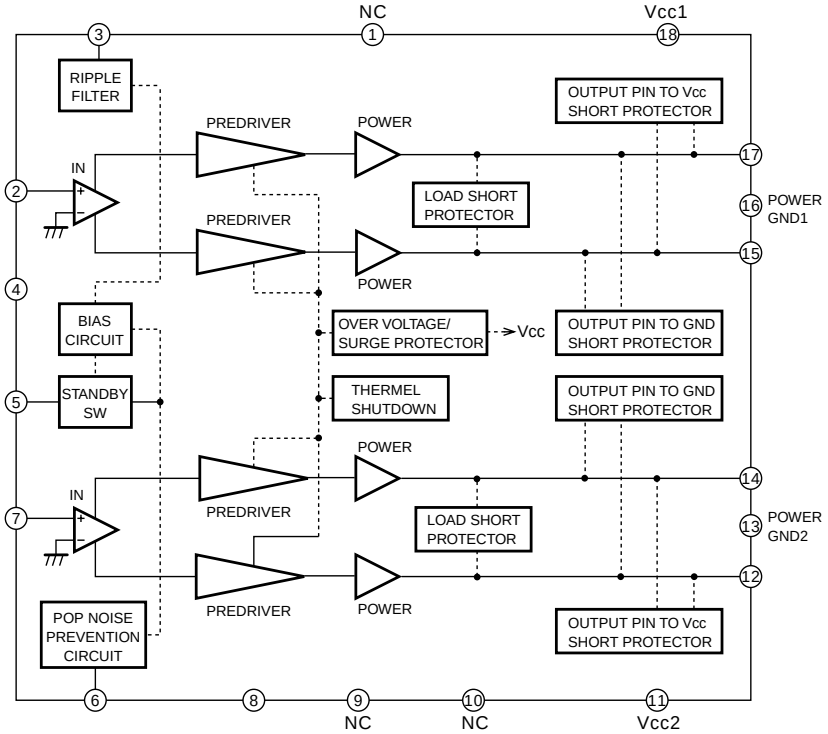
■ BA15218N (IC801/IC831) : Dual op amplifier



■ LA4705NA (IC631) : power amplifier

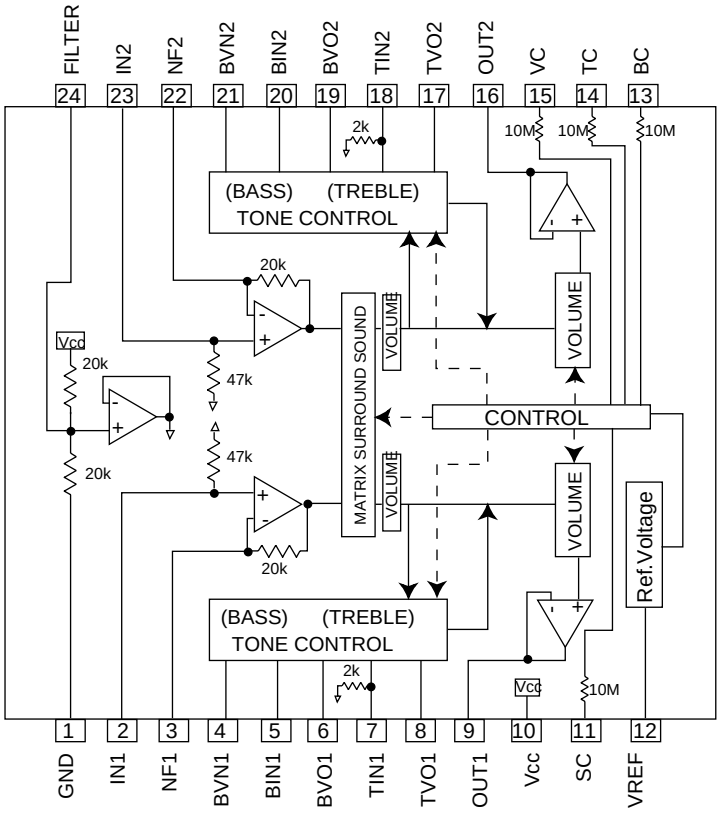






■ BH3852S (IC501) : E.Volume

1.Block diagram

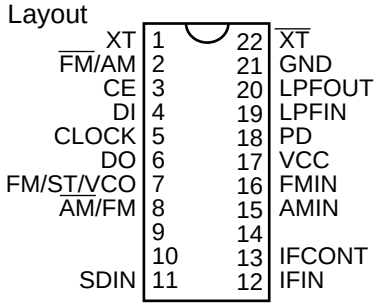


2.Pin function

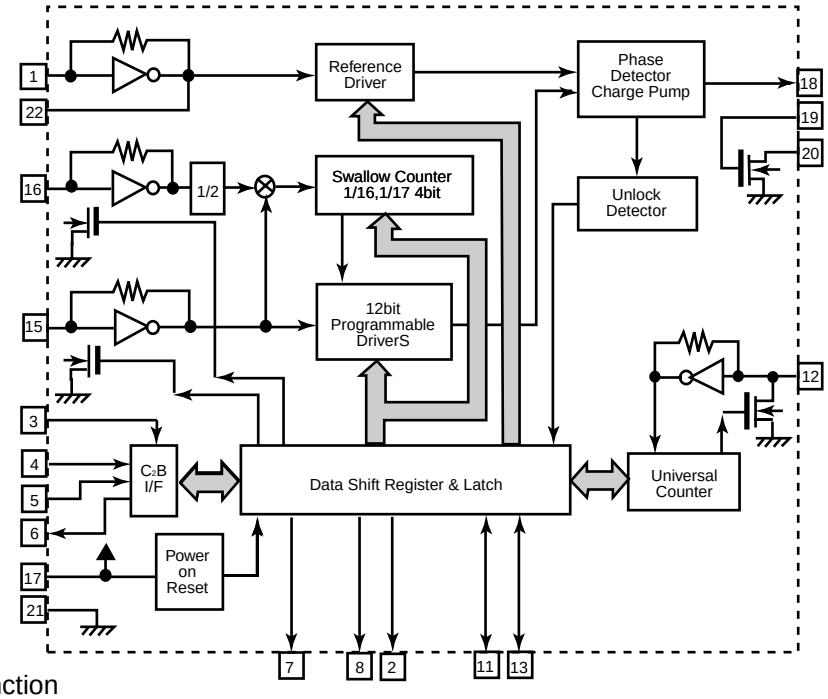
Pin No.	Pin name	I/O	Function	Pin No.	Pin name	I/O	Function
1	GND	-	Grand terminal	13	BASS	I	Terminal for bass control
2	IN1	I	Terminal for 1ch volume input	14	TRE	I	Terminal for treble control
3	NF1	I	Terminal for gain adjustment of input step amp.	15	VOL	I	Terminal for volume control
				16	OUT2	O	Terminal for 2ch volume output
4～6	BASS1	-	Terminal for connection of 1ch low-frequency filter	17.18	TRE2	-	Terminal for connection of 2ch high-frequency filter
7.8	TRE1	-	Terminal for connection of 1ch High frequency filter	19～21	BASS2	-	Terminal for connection of 2ch low-frequency filter
9	OUT1	O	Terminal for 1ch volume output	22	NF2	I	Terminal for gain adjustment of input step amp.
10	VCC	-	Terminal for power supply				
11	LIVE	-	Terminal for surround control	23	IN2	I	Terminal for 2ch volume output
12	VREF	O	Terminal for reference voltage output	24	VSET	-	Terminal for filter

■ LC72136N(IC2):PLL Frequency synthesizer

1. Layout



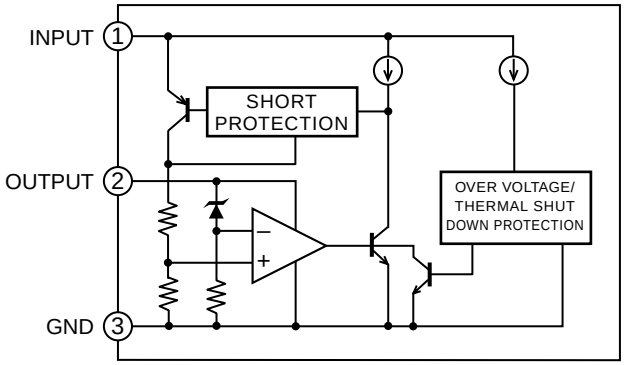
2. Block



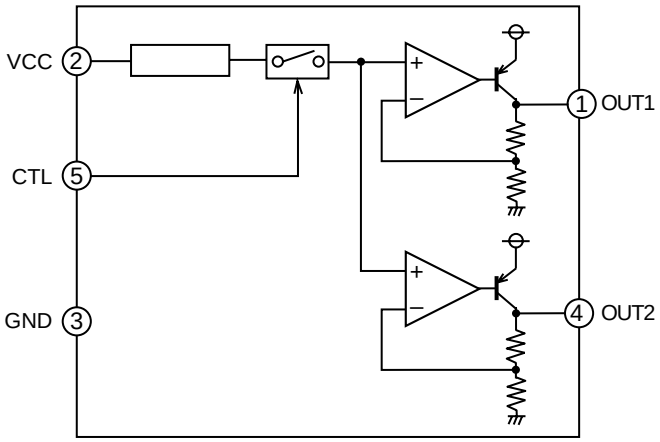
3. Function

Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	XT	I	X'tal oscillator connect (75kHz)	12	IFIN	I	IF counter signal input
2	$\overline{FM}$/AM	O	LOW:FM mode	13	IFCONT	O	IF signal output
3	CE	I	When data output/input for 4pin(input) and 6pin(output): H	14		-	Not use
4	DI	I	Input for receive the sirisl data from controller	15	AMIN	I	AM Local OSC signal output
5	CLOCK	I	Sync signal input use	16	FMIN	I	FM Local OSC signal input
6	DO	O	Data output for Controller Output port	17	VCC	-	Power suplly(VDD=4.5-5.5V) When power ON:Reset circuit move
7	FM/ST/VCO	O	"Low": MW mode	18	PD	O	PLL charge pump output(H: Local OSC frequency Height than Reference frequency. L: Low Agreement: Height impedance)
8	$\overline{AM}$/FM	O	Not use	19	LPFIN	I	Input for active lowpassfilter of PLL
9		-	Not use	20	LPFOUT	O	Output for active lowpassfilter of PLL
10		-	Input/output port	21	GND	-	Connected to GND
11	SDIN	I/O	Data input/output	22	$\overline{XT}$	I	X'tal oscillator(75KHz)

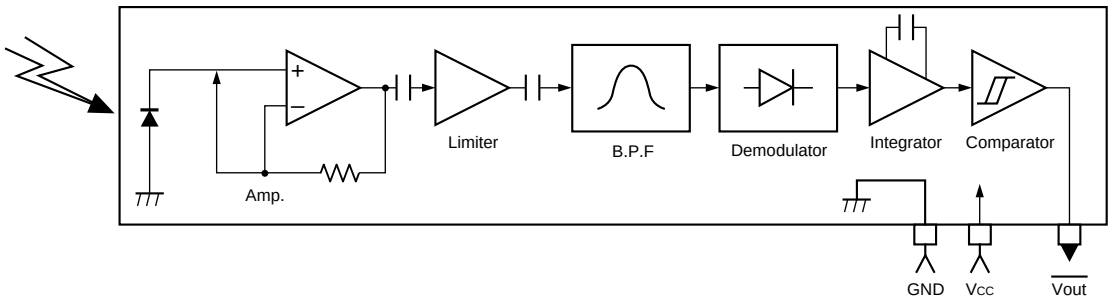
■ TA78DL06S(IC390) : Regulator



■ BA44W12ST-V5/Z1(IC310):Regulator

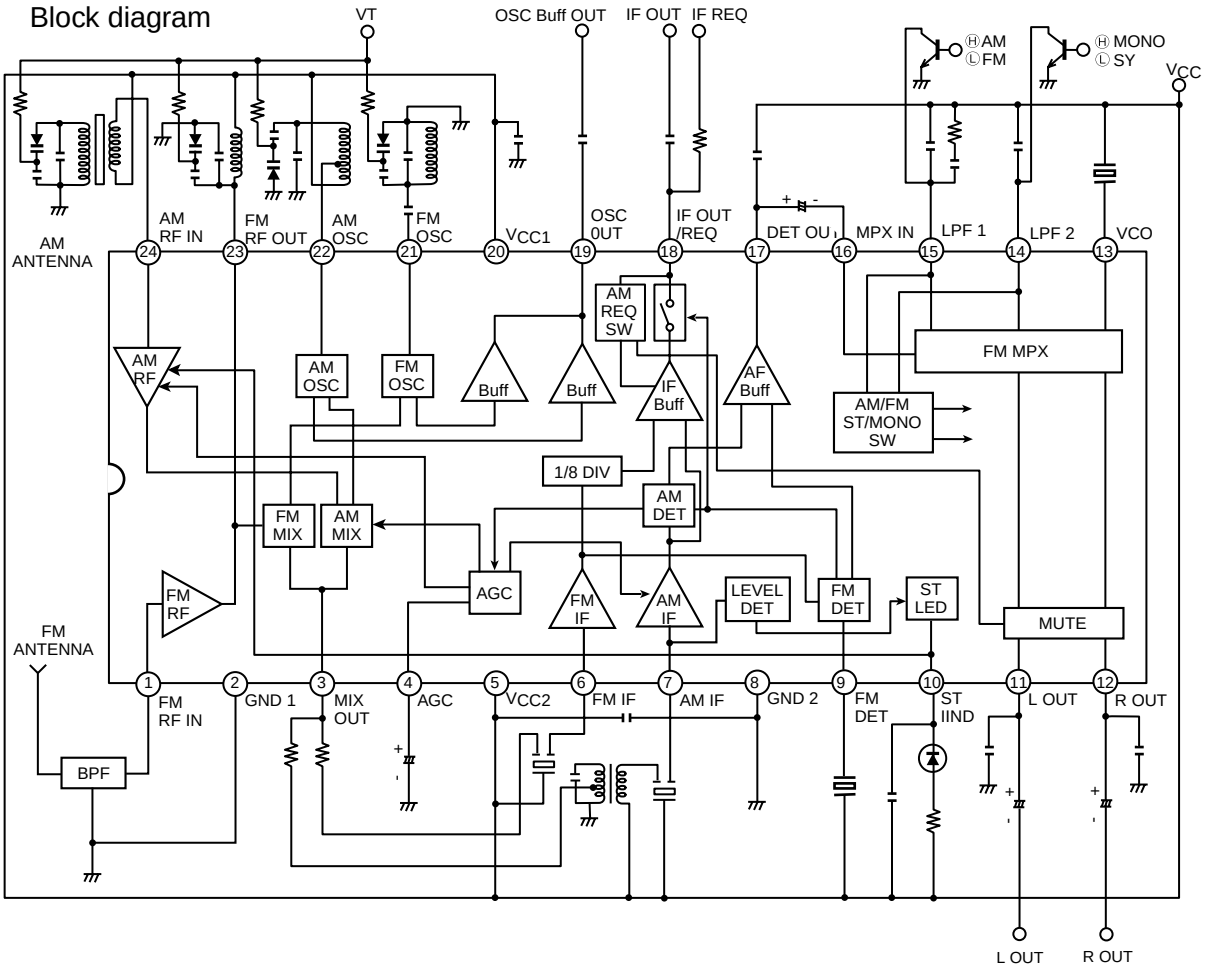


■ GP1U281X(IC903) : Remocon sensor



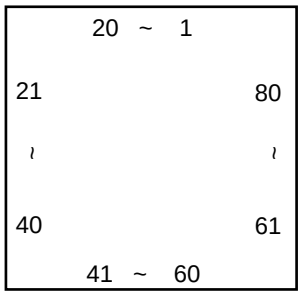
■ TA2008AN (IC 1): FM/AM,IF/DET

Block diagram

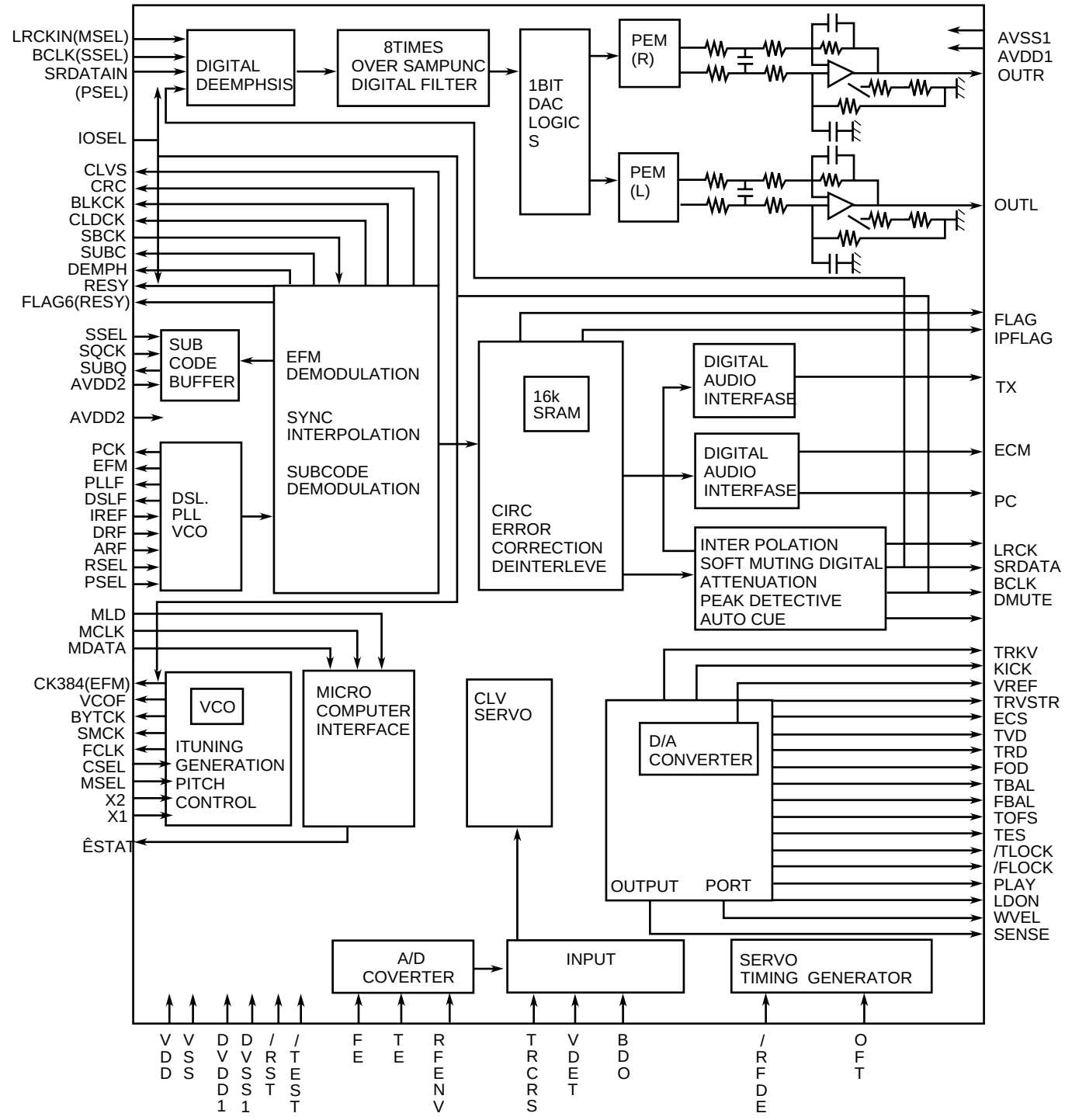


■ MN35510(IC603):DIGITAL SERVO&DIGITAL SIGNAL PROCESSER

1. Terminal Layout



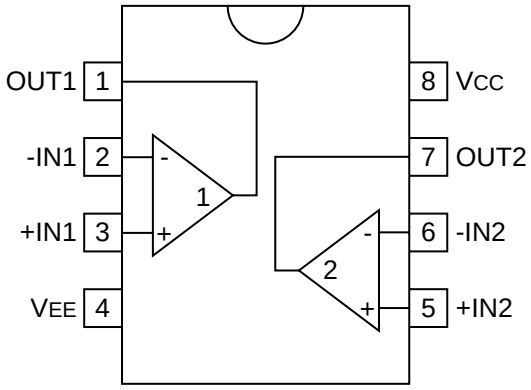
2.Block Diagram



3. Description

Pin No.	symbol	I/O	Description	Pin No.	symbol	I/O	Description
1	BCLK	O	Not used	41	TES	O	Tracking error shunt signal output(H:shunt)
2	LRCK	O	Not used	42	PLAY	–	Not used
3	SRDATA	O	Not used	43	WVEL	–	Not used
4	DVDD1	–	Power supply (Digital)	44	ARF	I	RF signal input
5	DVSS1	–	Connected to GND	45	IREF	I	Reference current input pin
6	TX	O	Digital audio interface output	46	DRF	I	Bias pin for DSL
7	MCLK	I	Micom command clock signal input (Data is latched at signal's rising point)	47	DSLF	I/O	Loop filter pin for DSL
8	MDATA	I	Micom command data input	48	PLLF	I/O	Loop filter pin for PLL
9	MLD	I	Micom command load signal input	49	VCOF	–	Not used
10	SENSE	O	Sence signal output	50	AVDD2	–	Power supply(Analog)
11	FLOCK	O	Focus lock signal output Active :Low	51	AVSS2	–	Connected to GND(Analog)
12	TLOCK	O	Tracking lock signal output Active :Low	52	EFM	–	Not used
13	BLKCK	O	sub-code - block - clock signal output	53	PCK	–	Not used
14	SQCK	I	Outside clock for sub-code Q resister input	54	PDO	–	Not used
15	SUBQ	O	Sub-code Q -code output	55	SUBC	–	Not used
16	DMUTE	–	Connected to GND	56	SBCK	–	Not used
17	STATUS	O	Status signal (CRC,CUE,CLVS,TTSTOP,ECLV,SQOK)	57	VSS	–	Connected to GND(for X'tal oscillation circuit)
18	RST	I	Reset signal input (L:Reset)	58	XI	I	Input of 16.9344MHz X'tal oscillation circuit
19	SMCK	–	Not used	59	X2	O	Output of X'tal oscillation circuit
20	PMCK	–	Not used	60	VDD	–	Power supply(for X'tal cscillation circuit)
21	TRV	O	Traverse enforced output	61	BYTCK	–	Not used
22	TVD	O	Traverse drive output	62	CLDCK	–	Not used
23	PC	–	Not used	63	FLAG	–	Not used
24	ECM	O	Spindle motor drive signal (Enforced mode output) 3-State	64	IPPLAG	–	Not used
25	ECS	O	Spindle motor drive signal (Servo error signal output)	65	FLAG	–	Not used
26	KICK	O	Kick pulse output	66	CLVS	–	Not used
27	TRD	O	Tracking drive output	67	CRC	–	Not used
28	FOD	O	Focus drive output	68	DEMPH		Not used
29	VREF	I	Reference voltage input pin for D/A output block (TVD,FOD,FBA,TBAL)	69	RESY	–	Not used
30	FBAL	O	Focus Balance adjust signal output	70	IOSEL	–	pull up
31	TBAL	O	Tracking Balance adjust signal output	71	TEST	–	pull up
32	FE	I	Focus error signal input(Analog input)	72	AVDD1	–	Power supply(Digital)
33	TE	I	Tracking error signal input(Analog input)	73	OUT L	O	Lch audio output
34	RF ENV	I	RF envelope signal input(Analog input)	74	AVSS1	–	Connected to GND
35	VDET	I	Vibration detect signal input(H:detect)	75	OUT R	O	Rch audio output
36	OFT	I	Off track signal input(H:off track)	76	RSEL	–	pull up
37	TRCRS	I	Track cross signal input	77	CSEL	–	Connected to GND
38	RFDET	I	RF detect signal input(L:detect)	78	PSEL	–	Connected to GND
39	BDO	I	BDO input pin(L:detect)	79	MSEL	–	Connected to GND
40	LDON	O	Laser ON signal output(H:on)	80	SSEL	–	Pull up

■ BA15218F-XE(IC401/751):OP AMP.



PARTS LIST

[RV-B550BU]

* All printed circuit boards and its assemblies are not available as service parts.

Area suffix

UY ---------- Argentina

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Exploded view of general assembly and parts list ---------- 3- 2
CD mechanism assembly and parts list ---------- 3- 7
Cassette mechanism assembly and parts list ---------- 3- 8
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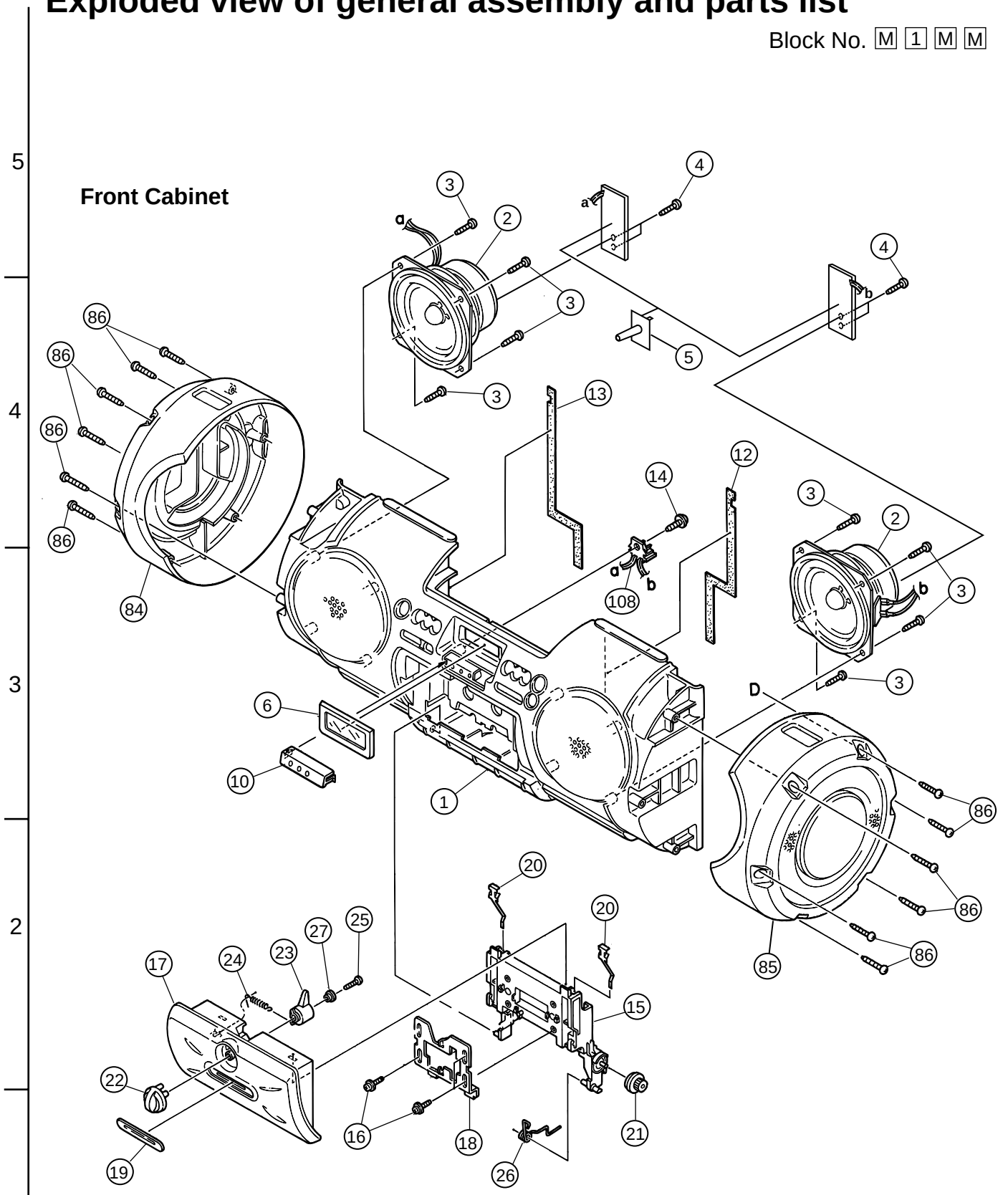
Packing materials and accessories parts list ---------- 3-24

Exploded view of general assembly and parts list

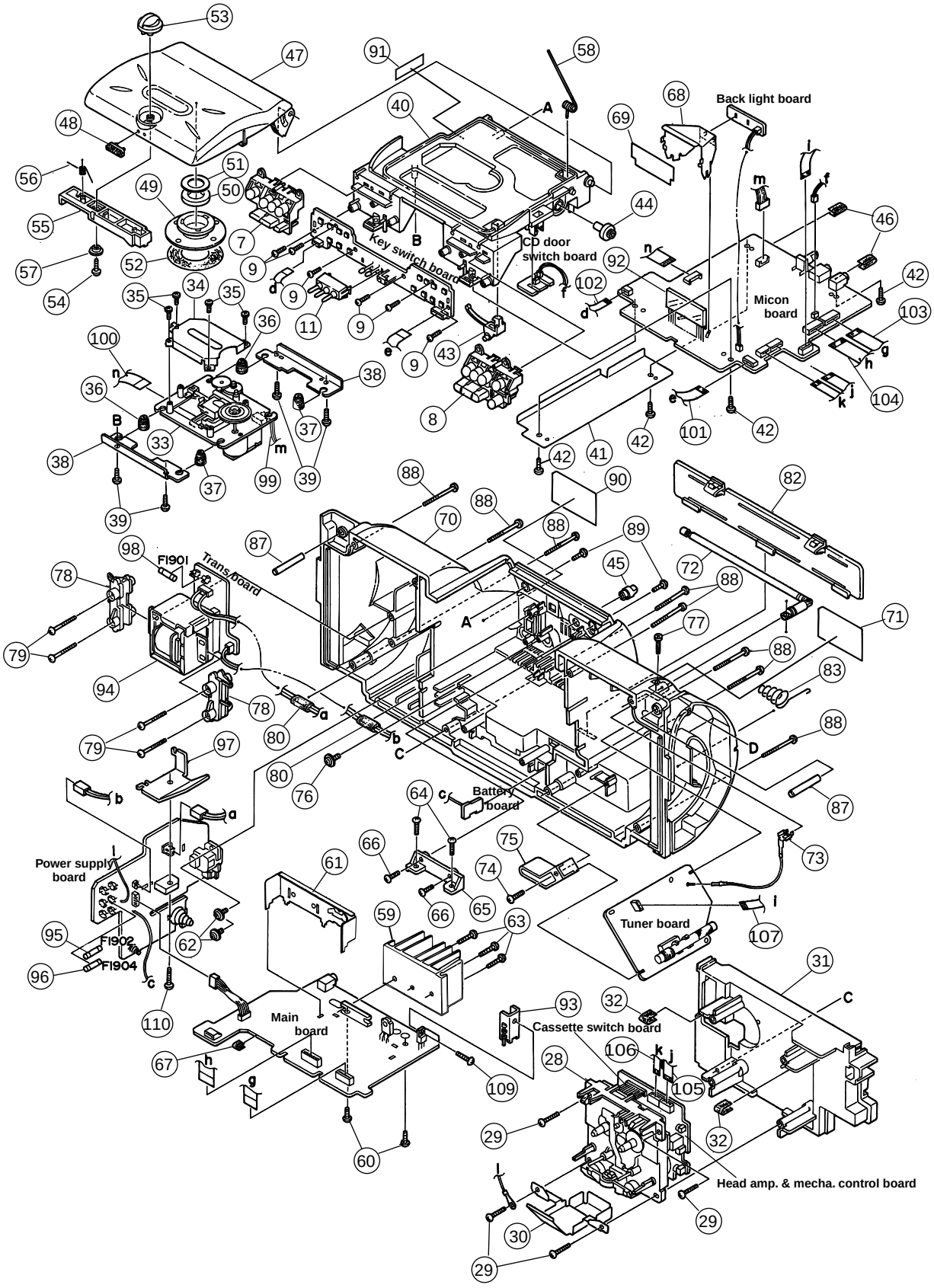
Block No. M 1 M M



Exploded view of general assembly and parts list

Block No. M 1 M M

Rear Cabinet



■ Parts list(General assembly)

Block No. M1MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	LV10160-012A	FRONT CABI ASSY	1	H.F.WELDING	
	2	LE10010-012A	SPEAKER	2	L/R	
	3	QYSBSF3010Z	SCREW	8	FOR SPK.	
	4	QYSBST3006Z	T.SCREW	4	SPK+LED PWB	
	5	LV41752-001A	SPK.LED HOLDER	2		
	6	VJK4520-081	LCD LENS	1	AS SILK X 1	
	7	LV20331-001A	POWER BUTTON	1		
	8	LV20332-001A	VOLUME BUTTON	1		
	9	QYSBSF2610Z	SCREW	6	BUTTON + SW PWB	
	10	LV40715-002A	LENS	1	AS PAD X 1	
	11	LV40716-002A	LED HOLDER	1	ABS	
	12	LV40750-001A	PACKING SHEET L	1	PEFU(FRONT CABI	
	13	LV40751-001A	PACKING SHEET R	1	PEFU(FRONT CABI	
	14	QYSBSFG3010Z	TAP SCREW	1	SPK.CON+FRONT	
	15	LV20298-003A	CASSETTE HOLDER	1	MIPS	
	16	VKZ4794-002	SPECIAL SCREW	3	EJECT SAFTY	
	17	LV20299-005A	DOOR COVER	1		
	18	LV30844-001A	EJECT SAFTY	1	CASS HOLDER	
	19	LV40717-003A	DOOR LENS	1	PC SILK X 2	
	20	VKY4180-001	CASSETTE SPRING	2	SUS	
	21	VYH5601-001	GEAR	1	POM	
	22	LV40718-001A	EJECT KNOB	1	ABS	
	23	LV40719-001A	CAM(CASS)	1	POM	
	24	LV40749-001A	TENSION SPRING	1	CAM + DOOR COVE	
	25	QYSDSF2614Z	SCREW	1	E.KNOB + CAM	
	26	LV40721-001A	DOOR SPRING	1	SUS T1.0	
	27	LV40720-002A	COLLAR (CASS)	1	SLIDER + D.COVE	
	28	----------	SLC MECHA ASS'Y	1		
	29	QYSBSF3014Z	SCREW	4	FOR SLC	
	30	LV30845-001A	HEAD SHIELD	1	SPTE T 0.4	
	31	LV10192-001A	CASS CHASSIS	1	MIPS	
	32	VYSA1R6-080	SPACER	2	FOR CASS CHASSI	
	33	----------	EXL-M6MAYPM	1		
	34	VJD5410-205	PICK COVER	1		
	35	QYSDSF2006M	SCREW	4		
	36	VKZ4791-001	INSULATOR	2		
	37	VKZ4791-001	INSULATOR	2		
	38	LV40723-001A	CD MECHA HOLDER	2	EGC T1.0	
	39	QYSBSF3010Z	SCREW	4	FOR HOLDER	
	40	LV10162-009A	CD CASE	1	MIPS	
	41	LV31305-001A	SHIELD	1	FOR CD CASE	
	42	QYSBSF3010Z	SCREW	4	FOR MICON PWB	
	43	LV40726-001A	LOCK LEVER	1	POM	
	44	VYH4769-002SS	GEAR	1	FOR CD CASE	
	45	VXL4442-001	VOLUME KNOB	1	MIC VOLUME	
	46	VYSA1R6-080	SPACER	2	FOR MICON PWB	
	47	LV10163-008A	CD DOOR	1		
	48	PQ45130-7	JVC MARK	1	FOR CD DOOR	

■ Parts list(General assembly)

Block No. M1MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	49	VYH3644-201	CLAMPER	1	FOR OPTIMA-6	
	50	VYH7313-003	MAGNET	1		
	51	VYH7314-001	YOKE	1		
	52	VYH7315-005	PAD	1		
	53	LV40718-001A	EJECT KNOB	1	ABS	
	54	QYSBSF2610Z	SCREW	1	E.KNOB + SLIDER	
	55	LV30846-001A	SLIDER (CD)	1	POM	
	56	LV40725-001A	TORSION SPRING	1	FOR SLIDER	
	57	LV40728-002A	COLLAR (CD)	1		
	58	LV40729-002A	CD DOOR SPRING	1	SUS	
	59	LV30847-001A	HEAT SINK(A)	1	AL T2.0	
	60	QYSBSF3012Z	SCREW	2	HEAT SINK(A)+PW	
	61	LV30848-001A	HEAT SINK(B)	1		
	62	E65923-003	TAPPING SCREW	2	FOR AC	
	63	QYSBSF3012Z	SCREW	3	FOR POWER IC	
	64	QYSBSF3012Z	SCREW	2	H.SINK(A)+BKT.	
	65	LV40730-001A	HEAT SINK BKT	1	FOR HEAT SINK	
	66	QYSBSF3010Z	SCREW	2	REAR + H.BKT.	
	67	VYSA1R6-080	SPACER	1	FOR AMP PWB	
	68	LV30849-001A	LCD HOLDER	1	SPTE T0.4	
	69	VYH8193-002	SHEET	1	LCD + LCD HOLDE	
	70	LV10164-030A	REAR CABINET	1	MIPS	
	71	VND4118-004	CAUTION LABEL	1	FOR REAR	
	72	FMJA3001-00A(D)	ROD ANT ASS'Y	1		
	73	VYH5012-006	TERMINAL LUG	1	SPTE T0.4	
	74	QYSBSF3012Z	SCREW	1	TUNER HOLDER+RE	
	75	LV41032-001A	TUNER HOLDER	1		
	76	E65923-003	TAPPING SCREW	1	FOR H.PHONES	
	77	QYSDSP3012N	SCREW	1	FOR ROD ANT	
	78	VYH8101-001	TRANS SUPPORT	2	POM	
	79	QYSBSF3030Z	SCREW	4	FOR TRANS	
	80	LV30225-021A	SPACER	2	TRANS WIRE	
	82	VJC2016-341	BATTERY COVER	1	MIPS	
	83	VYH5657-001	BATTERY SPRING	1		
	84	LV10165-005A	SIDE PROT.ASY L	1		
	85	LV10166-005A	SIDE PROT.ASY R	1		
	86	QYSBSF3012N	SCREW	12	FOR SIDE PROTEC	
	87	VKH3012-073	SHAFT(E)	2	REAR(S.BELT)	
	88	QYSBSF3040Z	SCREW	8	FRONT+REAR	
	89	QYSBSF3010Z	SCREW	2	CD CASE + REAR	
⚠	90	LV31998-004A	NAME PLATE	1		
	91	LV40231-001A	CAUTION LABEL	1		
	92	QLD0024-002	L.C.DISPL.PANEL	1		
	93	E70306-001	HEAT SINK	1		
⚠	94	QQT0247-004	POWER TRANS	1		
⚠	95	QMF51E2-4R0-J1	FUSE	1	F1902	
⚠	96	QMF51E2-6R3-J1	FUSE	1	F1904	
	97	LV41029-001A	HEAT SINK	1		

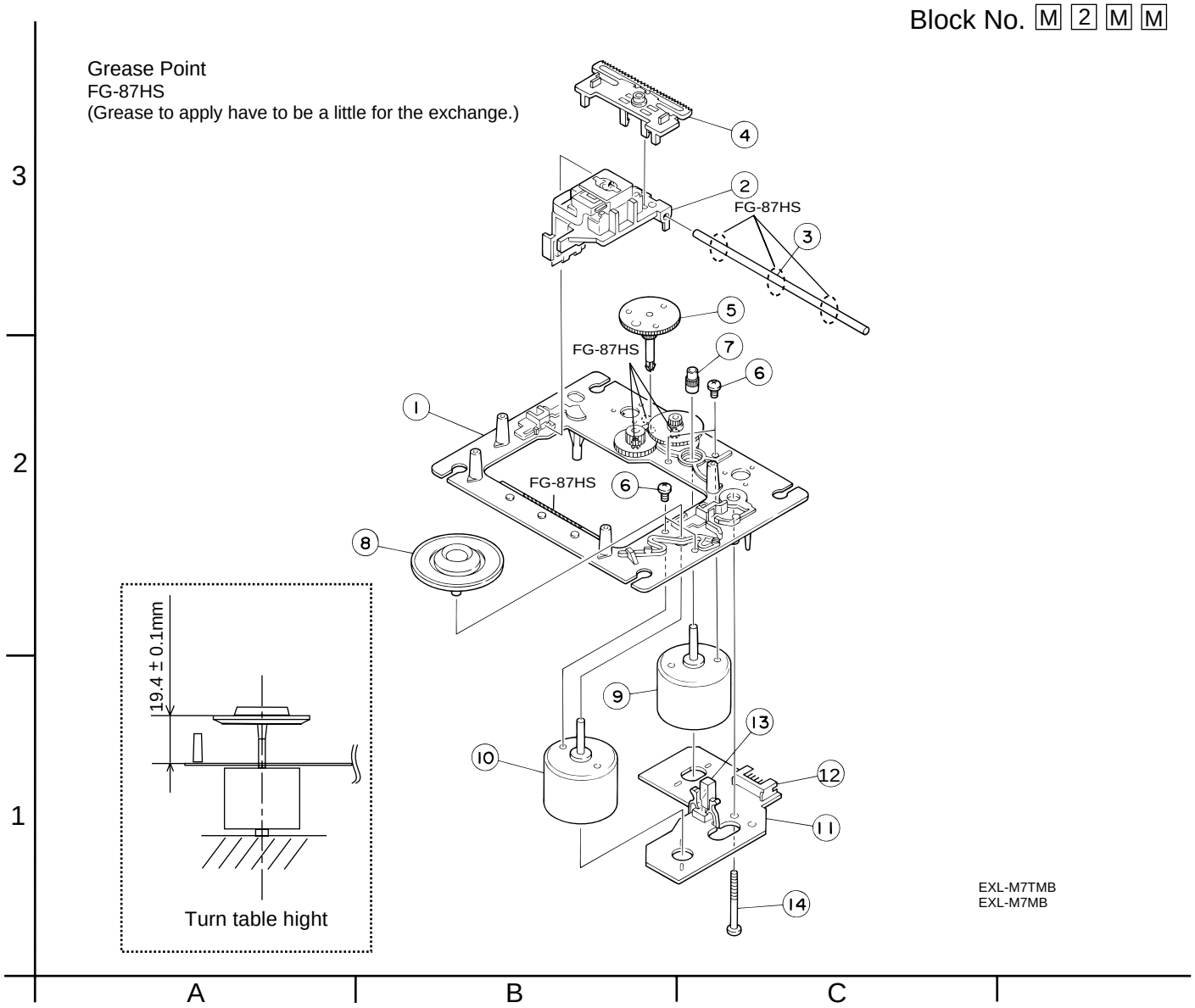
■ Parts list(General assembly)

Block No. M1MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	98	QMF51E2-R80-J1	FUSE	1	F1901	
	99	QJJ010-060606	SIN CR C-C WIRE	1		
	100	QUQ610-1508AJ	FFC WIRE	1		
	101	QUQC12-0806CJ	FFC WIRE	1		
	102	QUQC12-1006CJ	FFC WIRE	1		
	103	QUQ412-1313CJ	FFC WIRE	1		
	104	QUQ412-1415CJ	FFC WIRE	1		
	105	QUQ412-1012DJ	FFC WIRE	1		
	106	QUQ412-0914DJ	FFC WIRE	1		
	107	QUQ412-0912CJ	FFC WIRE	1		
	108	WJJ0034-010A	E-SI C WIRE C-C	1		
	109	QYSBSSF3010Z	SCREW	1		
	110	QYSBSF3014Z	SCREW	1		

CD mechanism assembly and parts list

Block No. M 2 M M



■ Parts list (CD mechanism)

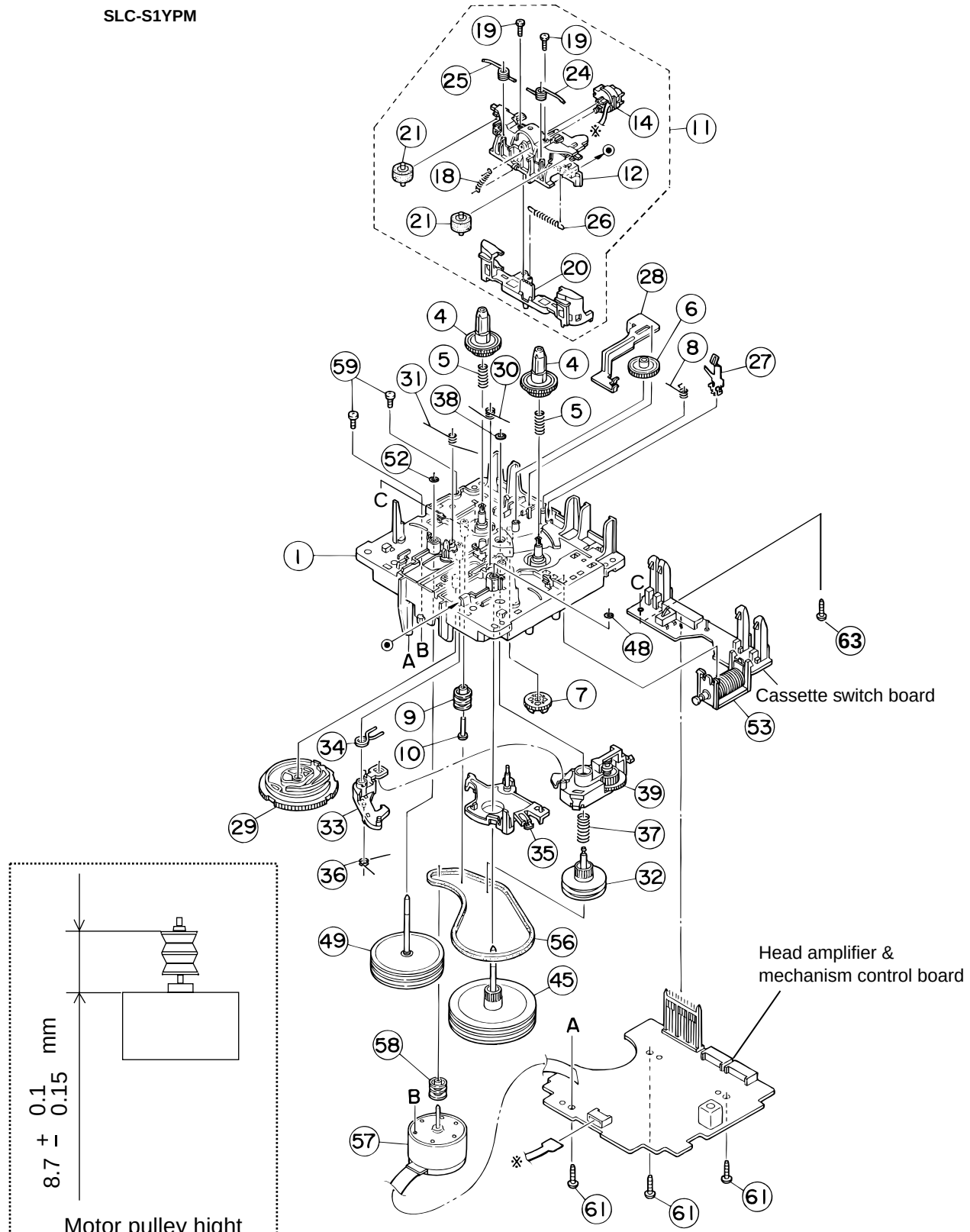
Block No. M2MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	E102731-221SM	MECHA BASE	1		
	2	OPTIMA-7B	OPTICAL PICK UP	1		
	3	E406777-002SM	CD SHAFT	1		
	4	LV31002-001A	CD RACK	1		
	5	E307745-441SM	MECHA GEAR	1		
	6	QYSDSP2003N	SCREW	4		
	7	E406750-442SM	PINION GEAR	1		
	8	EPB-001PK	TURN TABLE	1	SINGLE CD	
		EPB309173PKA	TURN TABLE	1	CHANGER CD	
	9	E406784-001	FEED MOTOR	1		
	10	QAR0130-001	SPPINDLE MOTOR	1		
	11	EMW10190-441	P.C.BOARD	1		
	12	QGA2001F1-06	6P PLUG ASSY	1		
	13	QSW0506-001	LEAF SWITCH	1		
	14	E75832-221SS	SPECIAL SCREW	1		

Cassette mechanism assembly and parts list

Block No. M 3 M M

SLC-S1YPM



■ Parts list(Cassette mechanism)

Block No. M3MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	VKS1165-00G	CHASSIS B.ASS'Y	1		
	4	VKS2274-002	REEL GEAR	2		
	5	VKW5286-002	B.T. SPRING	2		
	6	VKS5559-001	PLAY IDLE GEAR	1		
	7	VKS5597-00A	BUND ASS'Y	1		
	8	VKW5296-001	EARTH SPRING	1		
	9	VKR4749-003	IDLE PULLEY	1		
	10	VKH5786-003	SHAFT	1		
	11	VKS2275-00E	HEAD MOUNT ASSY	1		
	12	VKS1167-003	HEAD MOUNT BASE	1		
	14	LV41089-001A	R/P&E HEAD	1	VKS2275-00B	
	18	VKW5302-001	HEAD SPRING	1		
	19	VKZ4730-001	SPECIAL SCREW	2		
	20	VKS2277-005	DIRECTION LEVER	1		
	21	VKP4233-00A	PINCH ROL. ASSY	2		
	24	VKW5299-002	PIN ROL.SP.(R)	1		
	25	VKW5300-002	PIN ROL.SP.(L)	1		
	26	VKW5285-001	RETURN SPRING	1		
	27	VKY3149-002	CASSETTE SP.	1		
	28	VKM3906-002	PLAY SW LEVER	1		
	29	VKS1166-003	CONTROL CAM	1		
	30	VKW5279-001	HEAD BASE SP(R)	1		
	31	VKW5280-001	HEAD BASE SP(L)	1		
	32	VKS5603-00D	MAIN PULLEY ASY	1		
	33	VKS3785-001MM	FR ARM	1		
	34	VKW5284-002	SWING SPRING	1		
	35	VKS2278-003	TRIGGER ARM	1		
	36	VKW5301-001	FR SPRING	1		
	37	VKW5266-001	ELEVATOR SPRING	1		
	38	WDL214025	WASHER	1		
	39	VKS3786-00G	CLUTCH ASS'Y	1		
	45	VKF3205-00B	F.WHEEL ASSY(R)	1		
	48	WDL183425	SLIT WASHER	1		
	49	VKF3207-00B	F.WHEEL ASSY(L)	1		
	52	WDL173525-6	SLIT WASHER	1		
	53	VKZ3174-00A	DC SOLENOID	1		
	56	VKB3000-181	CAPSTAN BELT	1		
	57	MSI-5U2LWA	D.C.MOTOR ASS'Y	1		
	58	VKR4761-001	MOTOR PULLEY	1		
	59	QYSPSP2604Z	SCREW	2		
	61	QYSBSF2608Z	T.SCREW	3	FOR P.W.B.	
	63	QYSBSF2006Z	SCREW	1		

Grease point 1/3

Grease
- * **EM-30L**
- ● **UD-24**
- ◆ **LEN-320M**

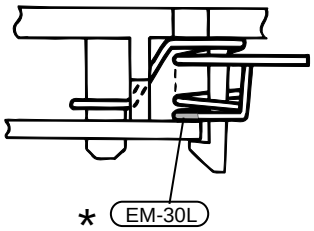


Fig.1

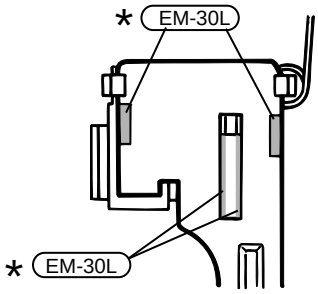
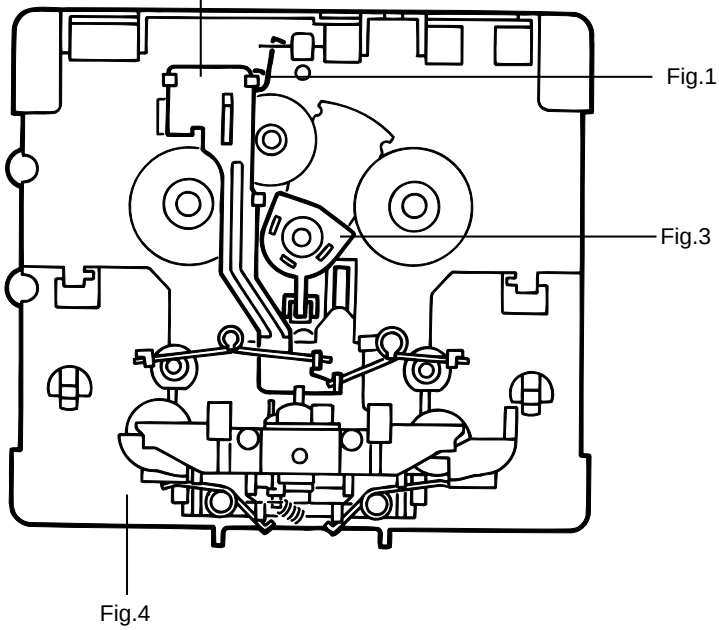


Fig.2



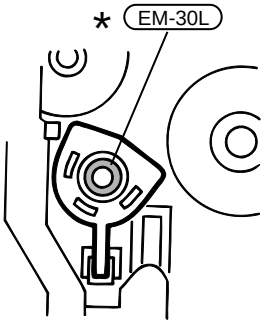


Fig.3

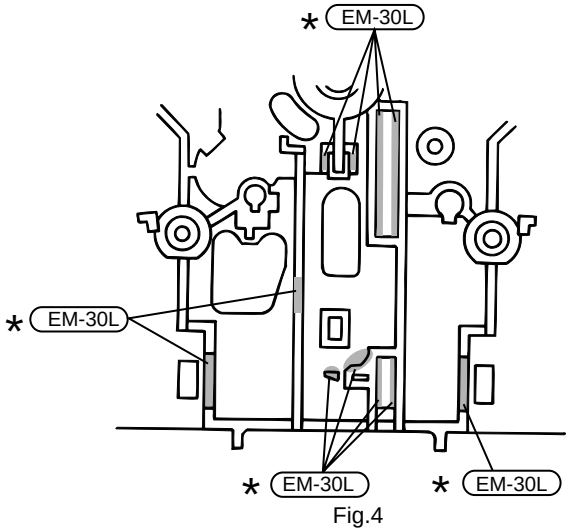


Fig.4

(Remove the Head mount Ass'y on the Chasis Base)

Grease point 2/3

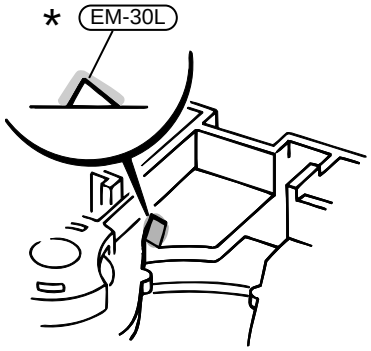


Fig.5

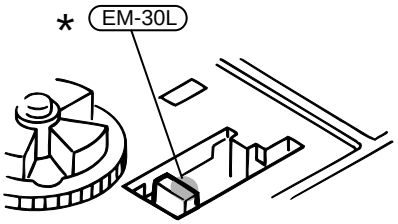
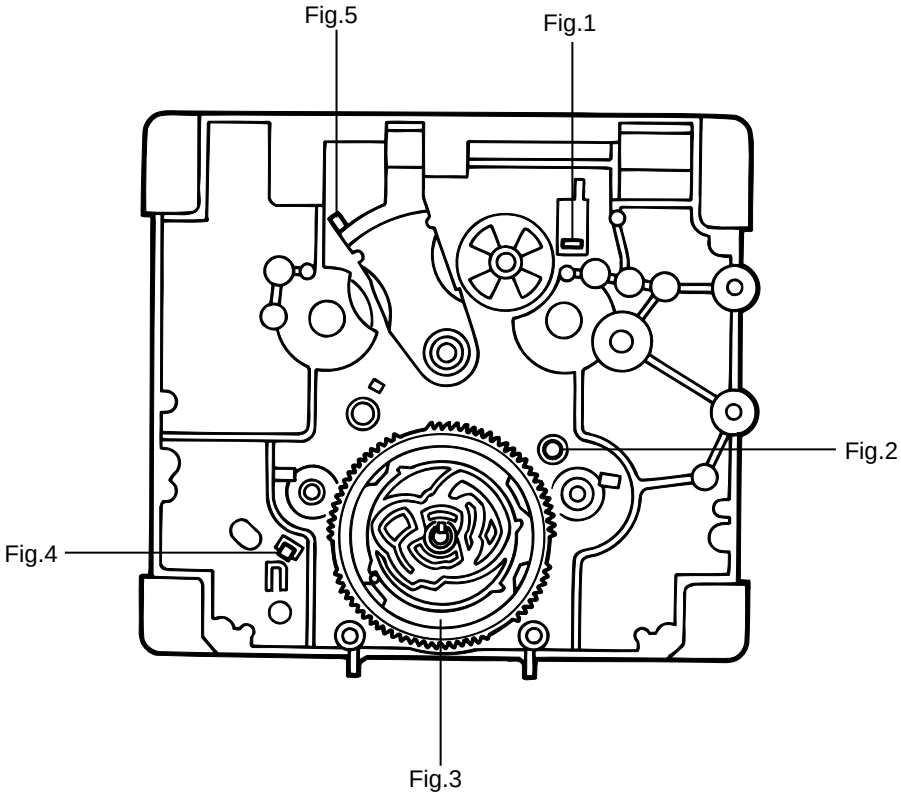


Fig.1



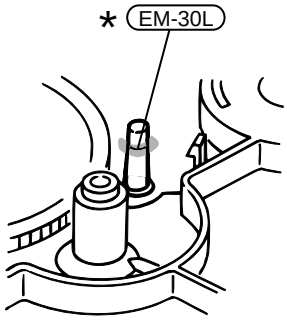


Fig.2

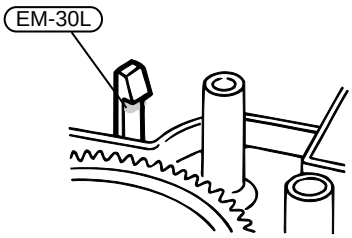
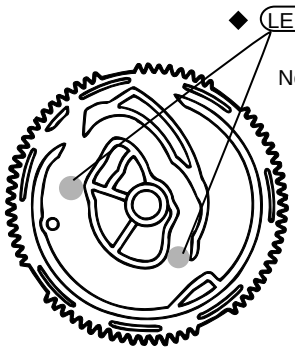


Fig.4



Note: It is a putting up of the control cam to UD-24H(Hanarl) and LEN-320M(Grease)dipping on the Control cam

Fig.3

Grease point 3/3

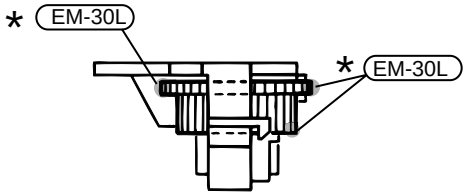


Fig.1

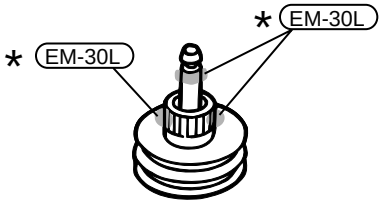
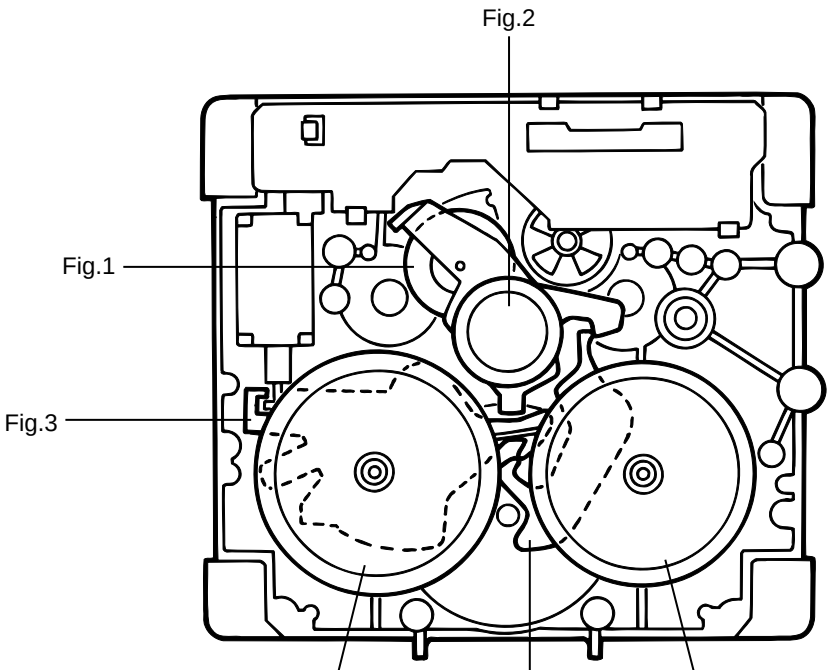


Fig.2



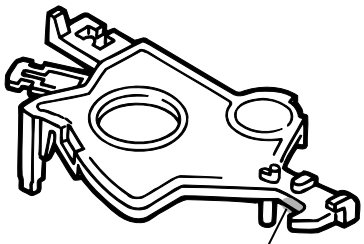


Fig.3

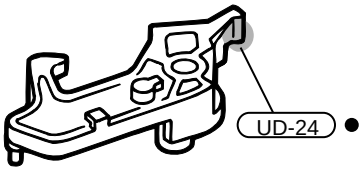


Fig.4

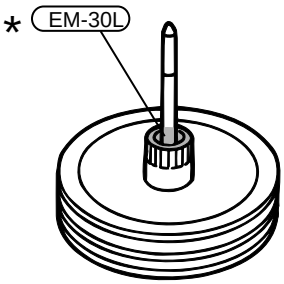


Fig.5

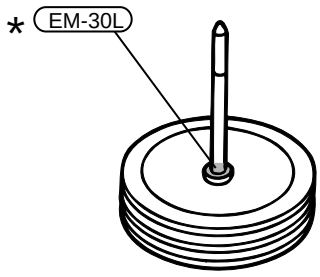


Fig.6

Electrical parts list

■ **Electrical parts list(Micon board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	C 604	QEKC1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 605	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C 606	NCB21HK-102X	C CAPACITOR		
	C 607	NCB21HK-102X	C CAPACITOR		
	C 608	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 609	NCS21HJ-101X	C CAPACITOR		
	C 610	QFLM1HJ-273Z	M CAPACITOR	.027MF 5% 50V	
	C 611	NCB21HK-472X	C CAPACITOR		
	C 612	NCB21HK-103X	C CAPACITOR		
	C 613	NCS21HJ-331X	C CAPACITOR		
	C 614	QFVF1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C 615	NCB21HK-223X	C CAPACITOR		
	C 616	NCB21HK-223X	C CAPACITOR		
	C 617	NCB21HK-223X	C CAPACITOR		
	C 618	NCB21HK-222X	C CAPACITOR		
	C 619	NCS21HJ-271X	C CAPACITOR		
	C 620	NCS21HJ-181X	C CAPACITOR		
	C 622	QETN1EM-476Z	E CAPACITOR	47MF 20% 25V	
	C 623	QFVF1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C 628	QDX31EM-473Z	C CAPACITOR		
	C 629	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 631	QETN1AM-477Z	E CAPACITOR	470MF 20% 10V	
	C 632	QEKC1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 640	NCB21HK-822X	C CAPACITOR		
	C 641	NCB21HK-223X	C CAPACITOR		
	C 651	NCS21HJ-270X	C CAPACITOR		
	C 652	NCS21HJ-270X	C CAPACITOR		
	C 653	NCB21HK-223X	C CAPACITOR		
	C 655	QDX31EM-473Z	C CAPACITOR		
	C 661	NCS21HJ-471X	C CAPACITOR		
	C 662	NCB21HK-223X	C CAPACITOR		
	C 663	QFLM1HJ-223Z	M CAPACITOR	.022MF 5% 50V	
	C 664	NCB21HK-223X	C CAPACITOR		
	C 665	QFVF1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C 671	NCB21HK-222X	C CAPACITOR		
	C 672	NCB21HK-222X	C CAPACITOR		
	C 673	QTE1A28-227Z	E CAPACITOR		
	C 674	NCB21HK-223X	C CAPACITOR		
	C 675	NCB21HK-102X	C CAPACITOR	AG-DG	
	C 691	NCS21HJ-151X	C CAPACITOR	DENGEN NOISE	
	C 692	NCS21HJ-151X	C CAPACITOR	DENGEN NOISE	
	C 693	NCS21HJ-151X	C CAPACITOR	DENGEN NOISE	
	C 694	NCS21HJ-151X	C CAPACITOR	DENGEN NOISE	
	C 696	NCS21HJ-101X	C CAPACITOR		
	C 697	NCS21HJ-101X	C CAPACITOR		
	C 698	NCS21HJ-101X	C CAPACITOR		
	C 699	NCS21HJ-101X	C CAPACITOR		
	CN251	QGF1205C1-10	CONNECTOR		
	CN252	QGF1205C1-08	CONNECTOR		
	CN403	QGF1205C1-09	CONNECTOR		
	CN405	QGF1205F1-10	CONNECTOR		
	CN406	QGF1205F1-09	CONNECTOR		
	CN407	QGF1205F1-13	CONNECTOR		
	CN408	QGF1205F1-14	CONNECTOR		
	CN601	QGF1008F1-15	21-41 CONNECTOR	TO RF	
	CN602	QGA2001C1-06	6P PLUG ASSY		
	CN901	QGF1205F1-10	CONNECTOR		
	CN902	QGF1205F1-08	CONNECTOR		
	CN904	QGA2501F1-02	CONNECTOR		
	CN907	QGA2501C1-02	2P CONNECTOR		
	C2501	QER61AM-226Z	E CAPACITOR	22MF 20% 10V	
	C2502	QER41CM-476	E CAPACITOR	47MF 20% 16V	
	C3361	QER41AM-107	E CAPACITOR	100MF 20% 10V	

	Item	Parts number	Parts name	Remarks	Area
	C3362	QER61EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C3571	QER41CM-476	E CAPACITOR	47MF 20% 16V	
	C4142	NCS21HJ-100X	C CAPACITOR		
	C4143	QER61EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C4144	QER61EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C4145	QTE1V06-106Z	E CAPACITOR		
	C4151	NCB21HK-681X	C CAPACITOR		
	C4242	NCS21HJ-100X	C CAPACITOR		
	C4243	QER61EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C4244	QER61EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C4245	QTE1V06-106Z	E CAPACITOR		
	C4251	NCB21HK-681X	C CAPACITOR		
	C4341	QER41CM-476	E CAPACITOR	47MF 20% 16V	
	C4342	QER61CM-107Z	E CAPACITOR	100MF 20% 16V	
	C4343	NCS21HJ-151X	C CAPACITOR		
	C4344	QER61EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C7351	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C7352	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C7353	NCS21HJ-390X	C CAPACITOR		
	C7354	QETN1HM-335Z	E CAPACITOR	3.3MF 20% 50V	
	C7355	QER61HM-474Z	E CAPACITOR	.47MF 20% 50V	
	C7356	QETN1HM-336Z	E CAPACITOR	33MF 20% 50V	
	C7357	QETN1HM-335Z	E CAPACITOR	3.3MF 20% 50V	
	C7358	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C9001	NCS21HJ-220X	C CAPACITOR	SUB CLOCK	
	C9002	NCS21HJ-220X	C CAPACITOR	SUB CLOCK	
	C9003	NCS21HJ-151X	C CAPACITOR	BEAT	
	C9004	NCS21HJ-471X	C CAPACITOR		
	C9005	NCS21HJ-240X	C CAPACITOR	MAIN CLOCK	
	C9006	NCS21HJ-240X	C CAPACITOR	MAIN CLOCK	
	C9007	NCS21HJ-360X	C CAPACITOR	MAIN CLOCK	
	C9008	NCS21HJ-360X	C CAPACITOR	MAIN CLOCK	
	C9009	NCB21HK-103X	C CAPACITOR	VDD	
	C9011	NCB21HK-103X	C CAPACITOR	RESET	
	C9012	QER61HM-226Z	E.CAPACITOR	22MF 20% 50V	
	C9013	NCS21HJ-151X	C CAPACITOR		
	C9015	NCS21HJ-151X	C CAPACITOR		
	C9016	NCS21HJ-151X	C CAPACITOR		
	C9017	NCS21HJ-151X	C CAPACITOR		
	C9018	QER41AM-107	E CAPACITOR	100MF 20% 10V	
	C9019	QER61HM-106Z	E CAPACITOR	BASS	
	C9020	QER61HM-106Z	E CAPACITOR	TRE	
	C9021	QER61HM-106Z	E CAPACITOR	10MF 20% 50V	
	C9022	NCB21HK-103X	C CAPACITOR	AVREF	
	C9023	NCS21HJ-151X	C CAPACITOR		
	C9024	NCS21HJ-101X	C CAPACITOR		
	C9025	NCS21HJ-151X	C CAPACITOR		
	C9026	NCS21HJ-151X	C CAPACITOR		
	C9027	NCS21HJ-680X	C CAPACITOR		
	C9031	NCB21HK-103X	C CAPACITOR		
	C9034	NCS21HJ-151X	C CAPACITOR		
	C9035	NCS21HJ-151X	C CAPACITOR		
	C9036	NCS21HJ-151X	C CAPACITOR		
	C9037	NCS21HJ-151X	C CAPACITOR		
	C9038	NCS21HJ-151X	C CAPACITOR		
	C9039	NCB21HK-103X	C CAPACITOR		
	C9040	NCB21HK-102X	C CAPACITOR		
	D 661	1SS133-T2	SI DIODE		
	D2502	SLR-342VR-T15	LED	STAND-BY LED	
	D2504	SLR-342MG-T15	LED	ACS IND (GR)	
	D2505	1SS133-T2	SI DIODE		
	D2506	SLR-342VR-T15	LED	AHB ON/OFF(R)	
	D2507	1SS133-T2	SI DIODE		

■ **Electrical parts list(Micon board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	D2508	SELU2E10C	LED	3MMLED	
	D2509	SELU2E10C	LED	3MMLED	
	D3361	1SS133-T2	SI DIODE		
	D3362	MTZJ3.9B-T2	Z DIODE		
	D3363	1SS133-T2	SI DIODE		
	D4301	1SS133-T2	SI DIODE		
	D4302	1SS133-T2	SI DIODE		
	D7351	1SS133-T2	SI DIODE		
	D7352	1SS133-T2	SI DIODE		
	D7353	1SS133-T2	SI DIODE		
	D9001	1SS133-T2	SI DIODE		
	D9002	MTZJ5.1C-T2	ZENER DIODE		
	D9006	MA700A-T2	S.B.DIODE		
	ICH01	VYH7237-002	IC HOLDER	FOR MICON	
	IC401	BA15218F-XE	IC	ADDER	
	IC601	AN8806SB-W	IC	RF AMP	
⚠	IC602	BA6897FP-W	IC	DRIVER	
	IC603	MN35510	IC	1CHIP PROCESSER	
	IC751	BA15218F-XE	IC		
	IC901	MN171603BJ1	IC	SYSTEM MICON	
	IC902	IC-PST9131-T	IC		
	IC903	GP1U281X	IC		
	J4301	QNS0047-001	JACK	AUX	
	J7351	QNS0043-001	JACK		
	K 698	QQR0779-001Z	INDUCTOR	B4121	
	K 699	QQR0779-001Z	INDUCTOR		
	K9001	QQR0779-001Z	INDUCTOR		
	L4351	QQR0779-001Z	INDUCTOR		
	L4352	QQR0779-001Z	INDUCTOR		
	L4353	QQL01BK-100Z	INDUCTOR		
	L4354	QQR0779-001Z	INDUCTOR		
	L4355	QQL01BK-100Z	INDUCTOR		
	L4356	QQR0779-001Z	INDUCTOR		
	L9001	QQL01BK-100Z	INDUCTOR		
	L9002	QQL01BK-100Z	INDUCTOR		
	PL 1	QLL0051-002	LAMP		
	O 601	2SA952/LK/-T	TRANSISTOR		
	O 631	2SA952/LK/-T	TRANSISTOR		
	O2501	DTA124XKA-X	CHIP D.TR		
	Q2504	UN2210-X	TRANSISTOR		
	O2505	2SC2412K/RS/-X	CHIP TRANSISTOR		
	O2506	DTC124TKA-X	TRANSISTOR		
⚠	O3361	2SA1037AK/RS/-X	TRANSISTOR	TUNER SW	
	Q3362	2SD601A/R/-X	TRANSISTOR		
	O3571	2SB624/4/-X	TRANSISTOR		
	O3572	2SD601A/R/-X	TRANSISTOR		
	O4101	2SD2144S/VW/-T	TRANSISTOR		
	O4102	2SD596/4/-X	TRANSISTOR		
	Q4201	2SD2144S/VW/-T	TRANSISTOR		
	O4202	2SD596/4/-X	TRANSISTOR		
	O4301	2SD601A/R/-X	TRANSISTOR		
	O7351	2SD601A/R/-X	TRANSISTOR		
	O7352	2SD601A/R/-X	TRANSISTOR		
	O7353	2SA1037AK/RS/-X	TRANSISTOR		
	O7354	UN2216-X	TRANSISTOR		
	O9001	2SC2714/O/-X	TRANSISTOR	MAIN CLOCK	
	O9002	2SC2714/O/-X	TRANSISTOR	MAIN CLOCK	
	O9003	2SD601A/R/-X	TRANSISTOR		
	O9006	2SA1037AK/RS/-X	TRANSISTOR		
	O9010	UN2210-X	TRANSISTOR		
	O9011	UN2210-X	TRANSISTOR		
	O9013	UN2210-X	TRANSISTOR		
	R 601	NRSA02J-113X	MG RESISTOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	R 603	NRSA02J-125X	MG RESISTOR		
	R 605	NRSA02J-274X	MG RESISTOR		
	R 606	NRSA02J-154X	MG RESISTOR		
	R 607	NRSA02J-273X	MG RESISTOR		
	R 609	NRSA02J-104X	MG RESISTOR		
	R 610	NRSA02J-154X	MG RESISTOR		
	R 612	NRSA02J-102X	MG RESISTOR		
	R 613	NRSA02J-121X	MG RESISTOR		
	R 614	NRSA02J-100X	MG RESISTOR		
	R 615	NRSA02J-120X	MG RESISTOR		
	R 616	NRSA02J-910X	MG RESISTOR		
	R 621	NRSA02J-330X	MG RESISTOR		
	R 622	NRSA02J-330X	MG RESISTOR		
	R 623	NRSA02J-330X	MG RESISTOR		
	R 631	NRSA02J-331X	MG RESISTOR		
	R 632	NRSA02J-101X	MG RESISTOR		
	R 633	NRSA02J-273X	MG RESISTOR		
	R 641	NRSA02J-563X	MG RESISTOR		
	R 642	NRSA02J-123X	MG RESISTOR		
	R 643	NRSA02J-822X	MG RESISTOR		
	R 644	NRSA02J-223X	MG RESISTOR		
	R 645	NRSA02J-223X	MG RESISTOR		
	R 646	NRSA02J-222X	MG RESISTOR		
	R 647	NRSA02J-472X	MG RESISTOR		
	R 651	NRSA02J-102X	MG RESISTOR		
	R 652	NRSA02J-102X	MG RESISTOR		
	R 653	NRSA02J-102X	MG RESISTOR		
	R 654	NRSA02J-102X	MG RESISTOR		
	R 655	NRSA02J-471X	MG RESISTOR		
	R 659	NRSA02J-221X	MG RESISTOR		
	R 661	NRSA02J-683X	MG RESISTOR		
	R 662	NRSA02J-155X	MG RESISTOR		
	R 663	NRSA02J-124X	MG RESISTOR		
	R 664	NRSA02J-471X	MG RESISTOR		
	R 666	NRSA02J-220X	MG RESISTOR		
	R 671	NRSA02J-103X	MG RESISTOR		
	R 672	NRSA02J-103X	MG RESISTOR		
	R 696	NRSA02J-222X	MG RESISTOR		
	R 697	NRSA02J-474X	MG RESISTOR		
	R2501	NRS181J-271X	MG RESISTOR		
	R2502	NRSA02J-391X	MG RESISTOR		
	R2503	NRSA02J-391X	MG RESISTOR		
	R2504	NRSA02J-101X	MG RESISTOR		
	R2505	NRSA02J-101X	MG RESISTOR		
	R2506	NRSA02J-121X	MG RESISTOR		
	R2507	NRSA02J-151X	MG RESISTOR		
	R2508	NRSA02J-221X	MG RESISTOR		
	R2509	NRSA02J-271X	MG RESISTOR		
	R2510	NRSA02J-391X	MG RESISTOR		
	R2511	NRSA02J-561X	MG RESISTOR		
	R2512	NRSA02J-102X	MG RESISTOR		
	R2513	NRSA02J-182X	MG RESISTOR		
	R2514	NRSA02J-391X	MG RESISTOR		
	R2515	NRSA02J-473X	MG RESISTOR		
	R2516	NRS181J-473X	MG RESISTOR		
	R2518	NRSA02J-223X	MG RESISTOR		
	R2520	NRSA02J-391X	MG RESISTOR		
	R2521	NRSA02J-102X	MG RESISTOR		
	R2522	NRSA02J-102X	MG RESISTOR		
	R2523	NRSA02J-332X	MG RESISTOR		
	R3361	NRSA02J-390X	MG RESISTOR		
	R3362	NRSA02J-102X	MG RESISTOR		
	R3363	NRSA02J-472X	MG RESISTOR		

■ **Electrical parts list(Micon board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	R3571	NRSA02J-472X	MG RESISTOR		
	R3572	NRSA02J-472X	MG RESISTOR		
	R3573	NRSA02J-472X	MG RESISTOR		
	R4141	NRSA02J-683X	MG RESISTOR		
	R4142	NRSA02J-273X	MG RESISTOR		
	R4143	NRSA02J-224X	MG RESISTOR		
	R4144	NRSA02J-203X	MG RESISTOR		
	R4145	NRSA02J-124X	MG RESISTOR		
	R4149	NRSA02J-102X	MG RESISTOR		
	R4150	NRSA02J-102X	MG RESISTOR		
	R4151	NRSA02J-823X	MG RESISTOR		
	R4153	NRSA02J-103X	MG RESISTOR		
	R4155	NRSA02J-183X	MG RESISTOR		
	R4158	NRSA02J-203X	MG RESISTOR		
	R4159	NRSA02J-821X	MG RESISTOR		
	R4160	NRSA02J-102X	MG RESISTOR		
	R4161	NRSA02J-273X	MG RESISTOR		
	R4241	NRSA02J-683X	MG RESISTOR		
	R4242	NRSA02J-273X	MG RESISTOR		
	R4243	NRSA02J-224X	MG RESISTOR		
	R4244	NRSA02J-203X	MG RESISTOR		
	R4245	NRSA02J-124X	MG RESISTOR		
	R4249	NRSA02J-102X	MG RESISTOR		
	R4250	NRSA02J-102X	MG RESISTOR		
	R4251	NRSA02J-823X	MG RESISTOR		
	R4253	NRSA02J-103X	MG RESISTOR		
	R4255	NRSA02J-183X	MG RESISTOR		
	R4258	NRSA02J-203X	MG RESISTOR		
	R4259	NRSA02J-821X	MG RESISTOR		
	R4260	NRSA02J-102X	MG RESISTOR		
	R4261	NRSA02J-273X	MG RESISTOR		
	R4301	NRSA02J-222X	MG RESISTOR		
	R4341	NRSA02J-103X	MG RESISTOR		
	R4342	NRSA02J-103X	MG RESISTOR		
	R4343	NRSA02J-101X	MG RESISTOR		
	R7351	NRS181J-101X	MG RESISTOR		
	R7352	NRSA02J-223X	MG RESISTOR		
	R7353	NRSA02J-223X	MG RESISTOR		
	R7354	NRSA02J-103X	MG RESISTOR		
	R7355	NRSA02J-222X	MG RESISTOR		
	R7356	NRSA02J-564X	MG RESISTOR		
	R7357	NRSA02J-104X	MG RESISTOR		
	R7358	NRSA02J-102X	MG RESISTOR		
	R7359	NRSA02J-103X	MG RESISTOR		
	R7360	NRSA02J-103X	MG RESISTOR		
	R7361	NRSA02J-224X	MG RESISTOR		
	R7362	NRSA02J-102X	MG RESISTOR		
	R7363	NRSA02J-102X	MG RESISTOR		
	R7364	NRSA02J-103X	MG RESISTOR		
	R7365	NRSA02J-473X	MG RESISTOR		
	R7366	NRSA02J-104X	MG RESISTOR		
	R9001	NRSA02J-681X	MG RESISTOR		
	R9002	NRSA02J-681X	MG RESISTOR		
	R9003	NRSA02J-222X	MG RESISTOR		
	R9004	NRSA02J-222X	MG RESISTOR		
	R9005	NRSA02J-153X	MG RESISTOR		
	R9006	NRSA02J-472X	MG RESISTOR		
	R9007	NRSA02J-222X	MG RESISTOR		
	R9009	NRSA02J-102X	MG RESISTOR		
	R9010	NRSA02J-103X	MG RESISTOR		
	R9011	NRSA02J-222X	MG RESISTOR		
	R9012	NRSA02J-222X	MG RESISTOR		
	R9013	NRSA02J-222X	MG RESISTOR		

⚠	Item	Parts number	Parts name	Remarks	
	R9014	NRSA02J-102X	MG RESISTOR		
	R9015	NRSA02J-104X	MG RESISTOR		
	R9016	NRSA02J-224X	MG RESISTOR		
	R9017	NRSA02J-822X	MG RESISTOR		
	R9018	NRSA02J-822X	MG RESISTOR		
	R9019	NRSA02J-104X	MG RESISTOR		
	R9020	NRSA02J-104X	MG RESISTOR		
	R9021	NRSA02J-102X	MG RESISTOR		
	R9022	NRSA02J-682X	MG RESISTOR		
	R9023	NRSA02J-103X	MG RESISTOR		
	R9024	NRSA02J-103X	MG RESISTOR		
	R9025	NRSA02J-103X	MG RESISTOR		
	R9026	NRSA02J-102X	MG RESISTOR		
	R9027	NRSA02J-103X	MG RESISTOR		
	R9028	NRSA02J-102X	MG RESISTOR		
	R9029	NRSA02J-102X	MG RESISTOR		
	R9030	NRSA02J-102X	MG RESISTOR		
	R9031	NRSA02J-102X	MG RESISTOR		
	R9032	NRSA02J-103X	MG RESISTOR		
	R9033	NRSA02J-102X	MG RESISTOR		
	R9035	NRSA02J-103X	MG RESISTOR		
	R9036	NRSA02J-102X	MG RESISTOR		
	R9037	NRSA02J-102X	MG RESISTOR		
	R9038	NRSA02J-103X	MG RESISTOR		
	R9039	NRSA02J-103X	MG RESISTOR		
	R9041	NRSA02J-104X	MG RESISTOR		
	R9044	NRSA02J-222X	MG RESISTOR		
	R9045	NRSA02J-333X	MG RESISTOR		
	R9046	NRSA02J-682X	MG RESISTOR		
	R9047	NRSA02J-103X	MG RESISTOR		
	R9048	NRSA02J-103X	MG RESISTOR		
	R9049	NRSA02J-103X	MG RESISTOR		
	R9050	NRSA02J-222X	MG RESISTOR		
	R9051	NRSA02J-222X	MG RESISTOR		
	R9052	NRSA02J-222X	MG RESISTOR		
	R9053	NRSA02J-222X	MG RESISTOR		
	R9054	NRSA02J-222X	MG RESISTOR		
	R9055	NRSA02J-222X	MG RESISTOR		
	R9056	NRSA02J-222X	MG RESISTOR		
	R9057	NRSA02J-103X	MG RESISTOR		
	R9059	NRSA02J-102X	MG RESISTOR		
	R9061	NRSA02J-104X	MG RESISTOR		
	R9062	NRSA02J-104X	MG RESISTOR		
	R9063	NRSA02J-104X	MG RESISTOR		
	R9065	NRSA02J-563X	MG RESISTOR		
	R9066	NRSA02J-473X	MG RESISTOR		
	R9067	NRSA02J-333X	MG RESISTOR		
	R9068	NRSA02J-104X	MG RESISTOR		
	R9069	NRSA02J-102X	MG RESISTOR		
	R9070	NRSA02J-102X	MG RESISTOR		
	R9071	NRSA02J-223X	MG RESISTOR		
	R9072	NRSA02J-333X	MG RESISTOR		
	R9073	NRSA02J-222X	MG RESISTOR		
	R9074	NRSA02J-103X	MG RESISTOR		
	R9075	NRSA02J-102X	MG RESISTOR		
	R9076	NRSA02J-102X	MG RESISTOR		
	R9077	NRSA02J-472X	MG RESISTOR		
	R9078	NRSA02J-223X	MG RESISTOR		
	R9079	NRSA02J-243X	MG RESISTOR		
	R9080	NRSA02J-243X	MG RESISTOR		
	R9081	NRSA02J-912X	MG RESISTOR		
	R9082	NRSA02J-102X	MG RESISTOR		
	R9083	NRSA02J-473X	MG RESISTOR		

■ **Electrical parts list(Micon board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	R9084	NRSA02J-222X	MG RESISTOR		
	R9085	NRSA02J-912X	MG RESISTOR		
	R9086	NRSA02J-473X	MG RESISTOR		
	R9087	NRSA02J-222X	MG RESISTOR		
	R9088	NRSA02J-222X	MG RESISTOR		
	R9089	NRSA02J-103X	MG RESISTOR		
	R9092	NRSA02J-103X	MG RESISTOR		
	R9093	NRSA02J-393X	MG RESISTOR		
	R9094	NRSA02J-473X	MG RESISTOR		
	R9095	NRSA02J-103X	MG RESISTOR		
	R9096	NRSA02J-104X	MG RESISTOR		
	R9097	NRSA02J-683X	MG RESISTOR		
	R9098	NRSA02J-103X	MG RESISTOR		
	R9099	NRSA02J-823X	MG RESISTOR		
	R9101	NRSA02J-102X	MG RESISTOR		
	R9102	NRSA02J-102X	MG RESISTOR		
	S2501	QSW0647-001Z	TACT SW		
	S2502	QSW0647-001Z	TACT SW		
	S2503	QSW0647-001Z	TACT SW		
	S2504	QSW0647-001Z	TACT SW		
	S2505	QSW0647-001Z	TACT SW		
	S2506	QSW0647-001Z	TACT SW		
	S2507	QSW0647-001Z	TACT SW		
	S2508	QSW0647-001Z	TACT SW		
	S2509	QSW0647-001Z	TACT SW		
	S2510	QSW0647-001Z	TACT SW		
	S2511	QSW0647-001Z	TACT SW		
	S2512	QSW0647-001Z	TACT SW		
	S2513	QSW0647-001Z	TACT SW		
	S2514	QSW0647-001Z	TACT SW		
	S2515	QSW0647-001Z	TACT SW		
⚠	S2521	QSW0122-001	PUSH SWITCH		
	VR731	QVQ0112-B24	V RESISTOR		
	WC101	QZW0038-001	WIRE CLAMP		
	WC102	QZW0038-001	WIRE CLAMP		
	X 651	QAX0369-001Z	CERA LOCK	16.9344MHZ	
	X9001	QAX0401-001	CRYSTAL	SUB CLOCK	
	X9002	QAX0410-001Z	CERA LOCK	MAIN CLOCK	

■ **Electrical parts list(Main board)** **Block No. 02**

⚠	Item	Parts number	Parts name	Remarks	Area
	C 3	QCSB1HK-6R8Y	C CAPACITOR	6.8PF 10% 50V	
	C 6	QDYB1CM-103Y	C CAPACITOR		
	C 7	QCS11HJ-200	C CAPACITOR	20PF 5% 50V	
	C 9	QCSB1HJ-120Y	C CAPACITOR	12PF 5% 50V	
	C 13	QDX31EM-223Z	C CAPACITOR		
	C 16	QDYB1CM-103Y	C CAPACITOR		
	C 17	QCS11HJ-200	C CAPACITOR	6.8PF 10% 50V	
	C 21	QDX31EM-473Z	C CAPACITOR		
	C 22	QFP31HJ-431Z	PP CAPACITOR	430PF 5% 50V	
	C 23	QDCB1HK-4R7Y	C CAPACITOR		
	C 25	QDX31EM-223Z	C CAPACITOR		
	C 26	QFLM1HJ-472Z	M CAPACITOR	4700PF 5% 50V	
	C 31	QDGB1HK-102Y	C CAPACITOR		
	C 32	QDYB1CM-103Y	C CAPACITOR		
	C 33	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 35	QDYB1CM-103Y	C CAPACITOR		
	C 36	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 37	QDGB1HK-102Y	C CAPACITOR		
	C 41	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 42	QDX31EM-473Z	C CAPACITOR		
	C 43	QDYB1CM-103Y	C CAPACITOR		
	C 44	QETN1HM-104Z	E CAPACITOR	.10MF 20% 50V	
	C 45	QETN1HM-474Z	E CAPACITOR	.47MF 20% 50V	
	C 47	QDX31EM-123Z	C CAPACITOR		
	C 48	QDX31EM-123Z	C CAPACITOR		
	C 49	QETN1HM-104Z	E CAPACITOR	.10MF 20% 50V	
	C 50	QETN1HM-104Z	E CAPACITOR	.10MF 20% 50V	
	C 51	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	C 52	QDGB1HK-102Y	C CAPACITOR		
	C 56	QDGB1HK-102Y	C CAPACITOR		
	C 60	QDGB1HK-102Y	C CAPACITOR		
	C 61	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 62	QDCB1HJ-120Y	C CAPACITOR		
	C 63	QDGB1HK-102Y	C CAPACITOR		
	C 64	QDCB1HJ-120Y	C CAPACITOR		
	C 65	QDGB1HK-102Y	C CAPACITOR		
	C 66	QCBB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C 69	QDXB1CM-222Y	C CAPACITOR		
	C 70	QETN1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 71	QETN1HM-335Z	E CAPACITOR	3.3MF 20% 50V	
	C 74	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 75	QDCB1HK-6R8Y	C CAPACITOR		
	C 76	QDX31EM-103Z	C CAPACITOR		
	C 77	QDGB1HK-102Y	C CAPACITOR		
	C 78	QDCB1HK-5R6Y	C CAPACITOR		
	CF 1	QAX0403-001	C FILTER		
	CF 3	QAX0404-001Z	C FILTER		
	CF 4	QAX0409-001	CERA LOCK		
	CN 1	QGF1205C1-09	CONNECTOR	TO MAIN	
	CN191	QGA2501C1-05	5P CONNECTOR		
	CN192	QGA3901C1-02	CONNECTOR		
	CN193	QGA7901C1-04	CONNECTOR		
	CN631	QGF1205C1-13	CONNECTOR		
	CN632	QGF1205C1-14	CONNECTOR		
	CN633	QGB2501K1-04	CONNECTOR		
	C1901	QFLM1HJ-683Z	M CAPACITOR	.068MF 5% 50V	
	C1902	QFLM1HJ-683Z	M CAPACITOR	.068MF 5% 50V	
	C1903	QFLM1HJ-683Z	M CAPACITOR	.068MF 5% 50V	
	C1904	QFLM1HJ-683Z	M CAPACITOR	.068MF 5% 50V	
	C3191	QTE1V06-226Z	E CAPACITOR		
	C3192	QETN1EM-107Z	E CAPACITOR	100MF 20% 25V	
	C3301	QDYB1CM-103Y	C CAPACITOR		
	C3302	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	

⚠	Item	Parts number	Parts name	Remarks	Area
	C3303	QFVJ1HJ-334Z	M CAPACITOR	.33MF 5% 50V	
	C3304	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C3791	QDYB1CM-103Y	C CAPACITOR		
	C3901	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C3902	QDX31EM-104Z	C CAPACITOR		
	C5101	QFLM1HJ-222Z	M CAPACITOR	2200PF 5% 50V	
	C5102	QTE1H28-475Z	E CAPACITOR		
	C5103	QTE1H06-475Z	E CAPACITOR		
	C5104	QFLM1HJ-563Z	M CAPACITOR	.056MF 5% 50V	
	C5105	QFLM1HJ-563Z	M CAPACITOR	.056MF 5% 50V	
	C5106	QFLM1HJ-562Z	M CAPACITOR	5600PF 5% 50V	
	C5201	QFLM1HJ-222Z	M CAPACITOR	2200PF 5% 50V	
	C5202	QTE1H28-475Z	E CAPACITOR		
	C5203	QTE1H06-475Z	E CAPACITOR		
	C5204	QFLM1HJ-563Z	M CAPACITOR	.056MF 5% 50V	
	C5205	QFLM1HJ-563Z	M CAPACITOR	.056MF 5% 50V	
	C5206	QFLM1HJ-562Z	M CAPACITOR	5600PF 5% 50V	
	C5301	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C5302	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C5303	QETN1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C5304	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C5305	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C5306	QETN1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C5307	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C5309	QETN1HM-474Z	E CAPACITOR	.47MF 20% 50V	
	C6101	QTE1H06-475Z	E CAPACITOR		
	C6102	QCBB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C6103	QFVF1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C6104	QFVF1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C6201	QTE1H06-475Z	E CAPACITOR		
	C6202	QCBB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C6203	QFVF1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C6204	QFVF1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C6301	QTE1C28-227Z	E CAPACITOR		
	C6302	QETN1EM-336Z	E CAPACITOR	33MF 20% 25V	
	C6303	QETN1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C6304	QETN1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C6305	QETN1EM-107Z	E CAPACITOR	100MF 20% 25V	
	C6306	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C6307	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C6308	QFV41HJ-473	CAPACITOR	.047MF 5% 50V	
	C6309	QFV41HJ-473	CAPACITOR	.047MF 5% 50V	
	C6314	QTE1E28-476Z	E CAPACITOR		
	C6315	QETM1EM-688	E CAPACITOR	6800MF 20% 25V	
	C6321	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C8101	QFN31HJ-124Z	M CAPACITOR	.12MF 5% 50V	
	C8102	QFN31HJ-124Z	M CAPACITOR	.12MF 5% 50V	
	C8103	QTE1E06-226Z	E CAPACITOR		
	C8105	QFVF1HJ-684Z	TF CAPACITOR	.68MF 5% 50V	
	C8106	QCS11HJ-150	C CAPACITOR	15PF 5% 50V	
	C8201	QFN31HJ-124Z	M CAPACITOR	.12MF 5% 50V	
	C8202	QFN31HJ-124Z	M CAPACITOR	.12MF 5% 50V	
	C8203	QTE1E06-226Z	E CAPACITOR		
	C8205	QFVF1HJ-684Z	TF CAPACITOR	.68MF 5% 50V	
	C8206	QCS11HJ-150	C CAPACITOR	15PF 5% 50V	
	C8301	QETN1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C8303	QETN1HM-104Z	E CAPACITOR	.10MF 20% 50V	
	C8304	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C8305	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C8322	QETN1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C8351	QCS11HJ-680	C CAPACITOR	68PF 5% 50V	
	C8352	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C8353	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	

■ **Electrical parts list(Main board)** **Block No. 02**

⚠	Item	Parts number	Parts name	Remarks	Area
	C8354	QCS11HJ-330	C CAPACITOR	33PF 5% 50V	
	C8355	QFVJ1HJ-393Z	CAPACITOR	.039MF 5% 50V	
	C8356	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C8357	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	
	C8358	QETN1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C8359	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C8360	QFLM1HJ-272Z	M CAPACITOR	2700PF 5% 50V	
	C8361	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C8362	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C8363	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	
	C8364	QDYB1CM-103Y	C CAPACITOR		
	D 1	SVC203SPA-JV-T	VARI CAP		
	D 2	SVC203SPA-JV-T	VARI CAP		
	D 5	1SS133-T2	SI DIODE		
	D 6	1SS133-T2	SI DIODE		
	D 8	SVC344-T	VARI CAP		
	D 10	SVC344-T	VARI CAP		
	D 12	DSK10C-T1	DIODE		
⚠	D1901	KBU603G-A3	DIODE		
	D1902	1N5401-TM	DIODE		
	D3192	MTZJ3.0B-T2	Z.DIODE		
	D3194	MTZJ7.5A-T2	Z.DIODE		
	D3195	1SS133-T2	SI DIODE		
	D3301	1SS133-T2	SI DIODE		
	D3302	1SS133-T2	SI DIODE		
	D3791	MTZJ6.2A-T2	Z.DIODE IDM		
	D3901	MTZJ8.2B-T2	DIODE		
	D6301	1SS133-T2	SI DIODE		
	D6302	1SS133-T2	SI DIODE		
	D6303	1SS133-T2	SI DIODE		
	D6304	1SS133-T2	SI DIODE		
	D8301	MTZJ4.3B-T2	ZENER DIODE		
	D8302	1SS133-T2	SI DIODE		
	D8303	1SS133-T2	SI DIODE		
	D8304	1SS133-T2	SI DIODE		
	D8351	1SS133-T2	SI DIODE		
	D8352	1SS133-T2	SI DIODE		
	D8353	1SS133-T2	SI DIODE		
	D8354	1SS133-T2	SI DIODE		
	D8355	1SS133-T2	SI DIODE		
	D8356	1SS133-T2	SI DIODE		
	D8357	1SS133-T2	SI DIODE		
	D8358	1SS133-T2	SI DIODE		
	FW251	QJL008-026802	SIN CR B-B WIRE	TO FW261 SPK LE	
	FW256	QJK005-021002	SIN CL C-B WIRE	CD OPEN/CLOSE S	
	FW401	QJL007-021002	SIN CR B-B WIRE	TO FW402 LAMP W	
	FW601	WJK0042-001A	E-SI C WIRE C-B	AMP-DENGEN	
	FW901	WJK0044-001A	E-SI C WIRE C-B	TRANS WIRE	
	FW902	WJK0043-001A	E-SI C WIRE C-B	TRANS WIRE	
	FW914	QJK002-024002	SIN CR C-B WIRE	MICON PWB - SPK	
	IC 1	TA2008AN	IC		
	IC 2	LC72136N	IC		
⚠	IC310	BA44W12ST-V5/Z1	IC		
⚠	IC390	KIA78DL06PI	IC		
	IC501	BH3852S	IC		
⚠	IC631	LA4705NA	IC	<111>	
	IC801	BA15218N	IC	BB AMP	
	IC831	BA15218N	IC		
⚠	J1901	QNC0042-001	AC SOCKET		
	J1902	QNA0016-001	DC JACK		
	J6301	QNS0072-001	HEADPHONE JACK		
	L 1	QQR0772-001	OSC COIL	FM OSC	
	L 2	QQR0769-001	RF COIL	FM RF	

⚠	Item	Parts number	Parts name	Remarks	Area
	L 3	QQR0770-001	BAR ANTENA	MW RF	
	L 4	QQR0723-001	OSC COIL	MW OSC	
	L 6	QQR0775-001	OSC COIL		
	L 7	QQL231K-221Y	INDUCTOR		
	L 12	QQR0756-001	INDUCTOR		
	L 13	QQR0874-001	COIL		
	O 3	2SC2668/O/-T	TRANSISTOR		
	O 4	2SA1175/HFE/-T	TRANSISTOR		
	O 5	2SC2668/O/-T	TRANSISTOR		
	O 6	2SC2668/O/-T	TRANSISTOR		
	O 16	2SC2668/O/-T	TRANSISTOR		
	O 17	DTA114YSA-T	D.TR		
	O3191	DTA114TSA-T	D.TR		
⚠	O3192	2SB1565/EF/	TRANSISTOR		
	O3193	2SA1175/HFE/-T	TRANSISTOR		
	O3194	2SC2785/FE/-T	TRANSISTOR		
	Q3198	DTC114TSA-T	D.TRANSISTOR		
	O3791	2SC2785/HFE/-T	TRANSISTOR		
	O5101	2SK105/EF/-T	TRANSISTOR(FET)		
	O5201	2SK105/EF/-T	TRANSISTOR(FET)		
	Q6101	2SD2144S/VW/-T	TRANSISTOR		
	O6201	2SD2144S/VW/-T	TRANSISTOR		
	O6301	DTA114ESA-T	DIGITAL.TR TAPE	MUTE DRIV	
	O8101	2SC2785/FE/-T	TRANSISTOR		
	O8102	2SC2785/FE/-T	TRANSISTOR		
	Q8103	2SC2785/FE/-T	TRANSISTOR		
	O8201	2SC2785/FE/-T	TRANSISTOR		
	O8202	2SC2785/FE/-T	TRANSISTOR		
	O8203	2SC2785/FE/-T	TRANSISTOR		
	O8301	DTC144TSA-T	D.TR		
	Q8302	DTA114ESA-T	DIGITAL.TR TAPE		
	O8351	DTC124TSA-T	TRANSISTOR		
	O8352	2SA1175/HFE/-T	TRANSISTOR		
	O8353	2SC2785/HFE/-T	TRANSISTOR		
	O8354	2SC2785/HFE/-T	TRANSISTOR		
	R 1	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 2	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 3	QRE141J-4R7Y	C RESISTOR	4.7 5% 1/4W	
	R 7	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 9	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 12	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 13	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 15	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 16	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 17	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 18	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 20	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 21	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 28	QRE141J-512Y	C RESISTOR	5.1K 5% 1/4W	
	R 30	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 32	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R 33	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 34	QRE141J-393Y	C RESISTOR	39K 5% 1/4W	
	R 35	QRE141J-393Y	C RESISTOR	39K 5% 1/4W	
	R 37	QRE141J-560Y	C RESISTOR	56 5% 1/4W	
	R 40	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 41	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 42	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 44	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 45	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 46	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 47	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 48	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	

■ **Electrical parts list(Main board)** **Block No. 02**

⚠	Item	Parts number	Parts name	Remarks	Area
	R 51	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 52	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 54	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 55	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 56	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R 57	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 59	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 60	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 61	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 64	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 66	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 71	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 72	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R1901	QRE141J-103Y	C RESISTOR	AC/DC	
	R3191	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	R3192	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	R3193	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R3194	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R3195	QRE141J-1R2Y	C RESISTOR	1.2 5% 1/4W	
	R3196	QRE141J-1R2Y	C RESISTOR	1.2 5% 1/4W	
	R3197	QRE141J-1R2Y	C RESISTOR	1.2 5% 1/4W	
	R3201	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R3202	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R3203	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R3204	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R3301	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R3302	QRE141J-682Y	C RESISTOR	6.8K 5% 1/4W	
	R3303	QRE141J-392Y	C RESISTOR	3.9K 5% 1/4W	
	R3304	QRE141J-682Y	C RESISTOR	6.8K 5% 1/4W	
	R3305	QRE141J-392Y	C RESISTOR	3.9K 5% 1/4W	
	R3791	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R3792	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R3793	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R3794	QRE141J-683Y	C RESISTOR	68K 5% 1/4W	
	R3901	QRZ9006-4R7X	F RESISTOR	4.7 1/0W	
	R5101	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R5102	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R5104	QRE141J-224Y	C RESISTOR	220K 5% 1/4W	
	R5201	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R5202	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R5204	QRE141J-224Y	C RESISTOR	220K 5% 1/4W	
	R5301	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R5302	QRE141J-333Y	C RESISTOR	33K 5% 1/4W	
	R5303	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R5305	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R5306	QRE141J-475Y	C RESISTOR	4.7M 5% 1/4W	
	R5307	QRE141J-475Y	C RESISTOR	4.7M 5% 1/4W	
	R5308	QRE141J-154Y	C RESISTOR	150K 5% 1/4W	
	R6101	QRE141J-2R2Y	C RESISTOR	2.2 5% 1/4W	
	R6102	QRE141J-2R2Y	C RESISTOR	2.2 5% 1/4W	
	R6103	QRE141J-121Y	C RESISTOR	120 5% 1/4W	
	R6104	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R6105	QRE141J-393Y	C RESISTOR	39K 5% 1/4W	
	R6106	QRE141J-393Y	C RESISTOR	39K 5% 1/4W	
	R6107	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R6108	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R6201	QRE141J-2R2Y	C RESISTOR	2.2 5% 1/4W	
	R6202	QRE141J-2R2Y	C RESISTOR	2.2 5% 1/4W	
	R6203	QRE141J-121Y	C RESISTOR	120 5% 1/4W	
	R6204	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R6205	QRE141J-393Y	C RESISTOR	39K 5% 1/4W	
	R6206	QRE141J-393Y	C RESISTOR	39K 5% 1/4W	
	R6207	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	

⚠	Item	Parts number	Parts name	Remarks	Area
	R6208	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R6301	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R6302	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R6303	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R6325	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R8101	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R8102	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R8103	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W	
	R8104	QRE141J-184Y	C RESISTOR	180K 5% 1/4W	
	R8105	QRE141J-821Y	C RESISTOR	820 5% 1/4W	
	R8107	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R8108	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R8109	QRE141J-474Y	C RESISTOR	470K 5% 1/4W	
	R8111	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R8113	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R8114	QRE141J-821Y	C RESISTOR	820 5% 1/4W	
	R8115	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R8116	QRE141J-154Y	C RESISTOR	150K 5% 1/4W	
	R8117	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R8201	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R8202	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R8203	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W	
	R8204	QRE141J-184Y	C RESISTOR	180K 5% 1/4W	
	R8205	QRE141J-821Y	C RESISTOR	820 5% 1/4W	
	R8207	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R8208	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R8209	QRE141J-474Y	C RESISTOR	470K 5% 1/4W	
	R8211	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R8213	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R8214	QRE141J-821Y	C RESISTOR	820 5% 1/4W	
	R8215	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R8216	QRE141J-154Y	C RESISTOR	150K 5% 1/4W	
	R8217	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R8301	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R8302	QRE141J-474Y	C RESISTOR	470K 5% 1/4W	
	R8303	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R8304	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R8305	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R8306	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R8321	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R8327	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R8351	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R8352	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R8354	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R8355	QRE141J-474Y	C RESISTOR	470K 5% 1/4W	
	R8356	QRE141J-124Y	C RESISTOR	120K 5% 1/4W	
	R8357	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R8358	QRE141J-475Y	C RESISTOR	4.7M 5% 1/4W	
	R8359	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R8360	QRE141J-822Y	C RESISTOR	8.2K 5% 1/4W	
	R8361	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R8362	QRE141J-822Y	C RESISTOR	8.2K 5% 1/4W	
	R8363	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R8364	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R8365	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R8366	QRE141J-224Y	C RESISTOR	220K 5% 1/4W	
	R8367	QRE141J-151Y	C RESISTOR	150 5% 1/4W	
	R8368	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R8369	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R8370	QRE141J-275Y	C RESISTOR	2.7M 5% 1/4W	
	R8372	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R8373	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
⚠	S1901	QSW0555-001	VOLTAGE SELCTOR		

■ **Electrical parts list(Main board)** **Block No. 02**

⚠	Item	Parts number	Parts name	Remarks	Area
	T 2	QQR0719-001	I.F.TRANSEFORME		
	TC 2	QAT3725-200Z	T CAPACITOR	MW RF	
	TC 3	QAT3725-100Z	T CAPACITOR		
	TP 1	QNZ0104-001	POST PIN	TO ROD ANT	
	TP 2	QNZ0104-001	POST PIN	GND	
	W 1	QUB223-19HPHP	SIN TWIST WIRE	BATT WIRE(UM-3)	
	W 3	QUB231-15HPHP	SIN TWIST WIRE		
	W 4	QUB233-06HPHP	SIN TWIST WIRE		
	X 1	QAX0402-001	CRYSTAL		
	Z1901	QNG0020-001Z	FUSE CLIP		
	Z1902	QNG0020-001Z	FUSE CLIP	FOR F1902	
	Z1904	QNG0020-001Z	FUSE CLIP	FOR F1904	
	Z1911	QNG0020-001Z	FUSE CLIP		
	Z1922	QNG0020-001Z	FUSE CLIP	FOR F1902	
	Z1944	QNG0020-001Z	FUSE CLIP	FOR F1904	

■ **Electrical parts list(Switch board)** **Block No. 03**

⚠	Item	Parts number	Parts name	Remarks	Area
	CN 1	QGB2011L1-10	10P PLUG ASSY		
	D 1	1SR139-400-T2	SI DIODE		
	IC 1	SG-105F3-BB,C	PHOTO SENSER		
	P 1	QNZ0104-001	POST PIN		
	SW 1	QSW0832-001	CASSETTE SWITCH	R.REC	
	SW 2	QSW0832-001	CASSETTE SWITCH	TAPE	
	SW 4	QSW0832-001	CASSETTE SWITCH	70U	
	SW 5	QSW0832-001	CASSETTE SWITCH	F.REC	
	SW 6	QSW0859-001	SWITCH		

■ **Electrical parts list(Head AMP.board)** **Block No. 04**

⚠	Item	Parts number	Parts name	Remarks	Area
	C 101	NCS21HJ-821X	C CAPACITOR	820PF 5% 50V	
	C 102	NCS21HJ-221X	C CAPACITOR	220PF 5% 50V	
	C 103	QEKJ0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 104	NCB21HK-333X	C CAPACITOR	.033MF 10% 50V	
	C 105	NCB21HK-222X	C CAPACITOR	2200PF 10% 50V	
	C 106	QEKJ1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 107	NCS21HJ-561X	C CAPACITOR	560PF 5% 50V	
	C 108	QEKJ1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C 109	QEKJ1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C 110	NCB21HK-682X	C.CAPA. C.M	6800PF 10% 50V	
	C 111	NCB21HK-122X	C CAPACITOR	1200PF 10% 50V	
	C 112	NCB21EK-683X	C CAPACITOR	.068MF 10% 25V	
	C 113	NCB21HK-222X	C CAPACITOR	2200PF 10% 50V	
	C 121	NCS21HJ-331X	C CAPACITOR	330PF 5% 50V	
	C 201	NCS21HJ-821X	C CAPACITOR	820PF 5% 50V	
	C 202	NCS21HJ-221X	C CAPACITOR	220PF 5% 50V	
	C 203	QEKJ0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 204	NCB21HK-333X	C CAPACITOR	.033MF 10% 50V	
	C 205	NCB21HK-222X	C CAPACITOR	2200PF 10% 50V	
	C 206	QEKJ1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 207	NCS21HJ-561X	C CAPACITOR	560PF 5% 50V	
	C 208	QEKJ1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C 209	QEKJ1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C 210	NCB21HK-682X	C.CAPA. C.M	6800PF 10% 50V	
	C 211	NCB21HK-122X	C CAPACITOR	1200PF 10% 50V	
	C 212	NCB21EK-683X	C CAPACITOR	.068MF 10% 25V	
	C 213	NCB21HK-222X	C CAPACITOR	2200PF 10% 50V	
	C 221	NCS21HJ-331X	C CAPACITOR	330PF 5% 50V	
	C 301	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 302	NCB21HK-393X	C CAPACITOR	.039MF 10% 50V	
	C 303	QEKJ0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 304	QEKJ1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 305	QEKJ1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 306	QEKJ1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C 307	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	C 308	NCB21HK-562X	C CAPACITOR	5600PF 10% 50V	
	C 309	NCB21HK-562X	C CAPACITOR	5600PF 10% 50V	
	C 310	NCB21HK-223X	C CAPACITOR	.022MF 10% 50V	
	C 311	NCB21HK-682X	C.CAPA. C.M	6800PF 10% 50V	
	C 313	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 314	QCZ0205-155Z	ML C CAP I/M	1.5MF	
	C 315	QCZ0205-155Z	ML C CAP I/M	1.5MF	
	C 316	QFG32AJ-103Z	PP CAPACITOR	.010MF 5% 100V	
	C 318	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	C 319	QFG32AJ-821Z	TF CAPACITOR	820PF 5% 100V	
	C 321	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	C 322	QFG32AJ-152Z	M CAPACITOR	1500PF 5% 100V	
	C 331	QEKJ1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C 351	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 371	QEKJ1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C 374	QEKJ1AM-107Z	E CAPACITOR	MOTOR +B	
	C 375	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 376	NCB21HK-103X	C CAPACITOR	.010MF 10% 50V	
	CN 31	QGF1205F1-06	CONNECTOR	PRI/HEAD	
	CN 32	QGB2011M1-10	PWB CONECTOR	PRI/MECHA	
	CN 33	QGF1205F1-09	CONNECTOR	PRI/MICON	
	CN 34	QGF1205F1-10	CONNECTOR	PRI/AMP	
	D 301	MA152WA-X	DIODE		
	D 309	MA704A-X	S.K.DIODE		
	D 375	MA3051/M/-X	ZENER DIODE		
	FW 31	QUM024-06A2Z3	EF FLAT		
	IC 31	BA3126N	IC	HEAD SW	
	IC 32	AN7317	IC	PB&REC	

⚠	Item	Parts number	Parts name	Remarks	Area
	IC 33	BU4094BCF-X	IC		
	L 301	QQR0620-001	OSC COIL(BIAS)		
	L 303	QQL01BK-100Z	INDUCTOR		
	O 101	DTC114TKA-X	TRANSISTOR		
	O 102	DTC114TKA-X	TRANSISTOR	REC EQ CONT.	
	O 201	DTC114TKA-X	TRANSISTOR		
	O 202	DTC114TKA-X	TRANSISTOR	REC EQ CONT.	
	O 301	DTA144EKA-X	TRANSISTOR	REC EQ CONT.	
	O 302	2SC2001/K/-T	TR I/M		
	O 303	2SC2001/K/-T	TR I/M		
	O 304	2SC2001/LK/-T	TRANSISTOR		
	O 305	2SC2001/LK/-T	TRANSISTOR		
	O 306	2SC2412K/RS/-X	CHIP TR.C.M		
	O 307	2SC2412K/RS/-X	CHIP TR.C.M		
	O 308	2SC2412K/RS/-X	CHIP TR.C.M		
	O 309	2SC2412K/RS/-X	CHIP TR.C.M		
	Q 321	DTC144EKA-X	TRANSISTOR		
	O 323	2SC2412K/RS/-X	CHIP TR.C.M		
	O 371	2SA952/LK/-T	TRANSISTOR	MOTER+B	
	O 372	DTC124EKA-X	TRANSISTOR		
	Q 375	2SB562/C/-T	TRANSISTOR	SOLENOID DRIVE	
	O 376	2SC2412K/RS/-X	CHIP TR.C.M		
	R 101	NRSA02J-220X	MG RESISTOR	22 5% 1/10W	
	R 102	NRSA02J-182X	MG RESISTOR	1.8K 5% 1/10W	
	R 103	NRSA02J-242NY	MG RESISTOR	2.4K 5% 1/10W	
	R 104	NRSA02J-122X	MG RESISTOR	1.2K 5% 1/10W	
	R 105	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R 106	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W	
	R 107	NRSA02J-123X	RES. C.M	12K 5% 1/10W	
	R 108	NRSA02J-562X	MG RESISTOR	5.6K 5% 1/10W	
	R 109	NRSA02J-122X	MG RESISTOR	1.2K 5% 1/10W	
	R 110	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R 111	NRSA02J-333X	MG RESISTOR	33K 5% 1/10W	
	R 112	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R 113	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R 114	NRSA02J-272X	MG RESISTOR	2.7K 5% 1/10W	
	R 116	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 121	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 201	NRSA02J-220X	MG RESISTOR	22 5% 1/10W	
	R 202	NRSA02J-182X	MG RESISTOR	1.8K 5% 1/10W	
	R 203	NRSA02J-242NY	MG RESISTOR	2.4K 5% 1/10W	
	R 204	NRSA02J-122X	MG RESISTOR	1.2K 5% 1/10W	
	R 205	NRSA02J-104X	MG RESISTOR	100K 5% 1/10W	
	R 206	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W	
	R 207	NRSA02J-123X	RES. C.M	12K 5% 1/10W	
	R 208	NRSA02J-562X	MG RESISTOR	5.6K 5% 1/10W	
	R 209	NRSA02J-122X	MG RESISTOR	1.2K 5% 1/10W	
	R 210	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R 211	NRSA02J-333X	MG RESISTOR	33K 5% 1/10W	
	R 212	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R 213	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R 214	NRSA02J-272X	MG RESISTOR	2.7K 5% 1/10W	
	R 216	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 221	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 301	NRS181J-221X	MG RESISTOR	220 5% 1/8W	
	R 303	NRSA02J-393X	MG RESISTOR	39K 5% 1/10W	
	R 304	NRS181J-101X	MG RESISTOR	100 5% 1/8W	
	R 305	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R 306	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R 310	NRS181J-560X	MG RESISTOR	56 5% 1/8W	
	R 311	NRS181J-560X	MG RESISTOR	56 5% 1/8W	
	R 313	NRSA02J-3R3NY	RES. C.M	3.3 5% 1/10W	
	R 314	NRSA02J-223X	RES. C.M	22K 5% 1/10W	

■ **Electrical parts list(Head AMP. board)** **Block No. 04**

⚠	Item	Parts number	Parts name	Remarks	Area
	R 315	NRSA02J-100X	MG RESISTOR	10 5% 1/10W	
	R 316	NRSA02J-223X	RES. C.M	22K 5% 1/10W	
	R 317	NRSA02J-100X	MG RESISTOR	10 5% 1/10W	
	R 319	NRSA02J-152X	MG RESISTOR	1.5K 5% 1/10W	
	R 322	NRSA02J-152X	MG RESISTOR	1.5K 5% 1/10W	
	R 327	NRSA02J-474X	MG RESISTOR	470K 5% 1/10W	
	R 332	NRSA02J-123X	RES. C.M	12K 5% 1/10W	
	R 333	NRSA02J-123X	RES. C.M	12K 5% 1/10W	
	R 335	NRSA02J-152X	MG RESISTOR	1.5K 5% 1/10W	
	R 336	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	R 337	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W	
	R 338	NRSA02J-392X	MG RESISTOR	3.9K 5% 1/10W	
	R 339	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W	
	R 340	NRS181J-391X	MG RESISTOR	390 5% 1/8W	
	R 341	NRSA02J-123X	RES. C.M	12K 5% 1/10W	
	R 342	NRSA02J-203X	MG RESISTOR	20K 5% 1/10W	
	R 343	NRSA02J-183X	MG RESISTOR	18K 5% 1/10W	
	R 351	NRSA02J-683X	MG RESISTOR	68K 5% 1/10W	
	R 352	NRSA02J-912X	RES. C.M	9.1K 5% 1/10W	
	R 371	NRSA02J-123X	RES. C.M	12K 5% 1/10W	
	R 372	NRSA02J-102X	RES. C.M	1.0K 5% 1/10W	
	R 375	NRSA02J-151X	MG RESISTOR	150 5% 1/10W	
	R 376	NRSA02J-472X	RES. C.M	4.7K 5% 1/10W	
	VR 31	QVP0008-503Z	SEMI V RESISTOR	BIAS ADJ	
	VR 32	QVP0008-503Z	SEMI V RESISTOR	BIAS ADJ	
	VR 37	QVP0008-103Z	SEMI V RESISTOR	TAPE SPEED ADJ	

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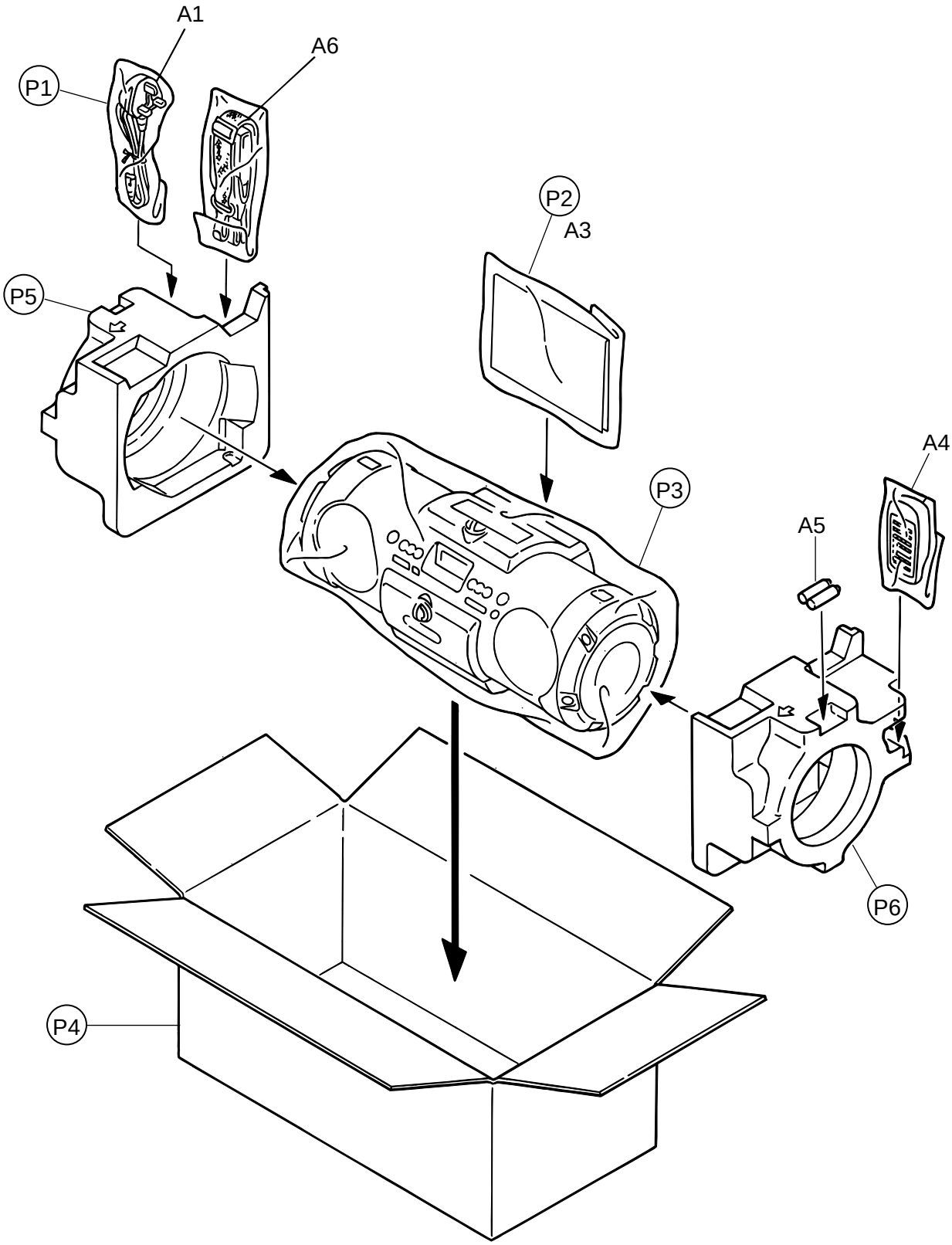
Packing materials and accessories parts list

Block No. M 4 M M
Block No. M 5 M M



■ Parts list(Packing)

Block No. M4MM

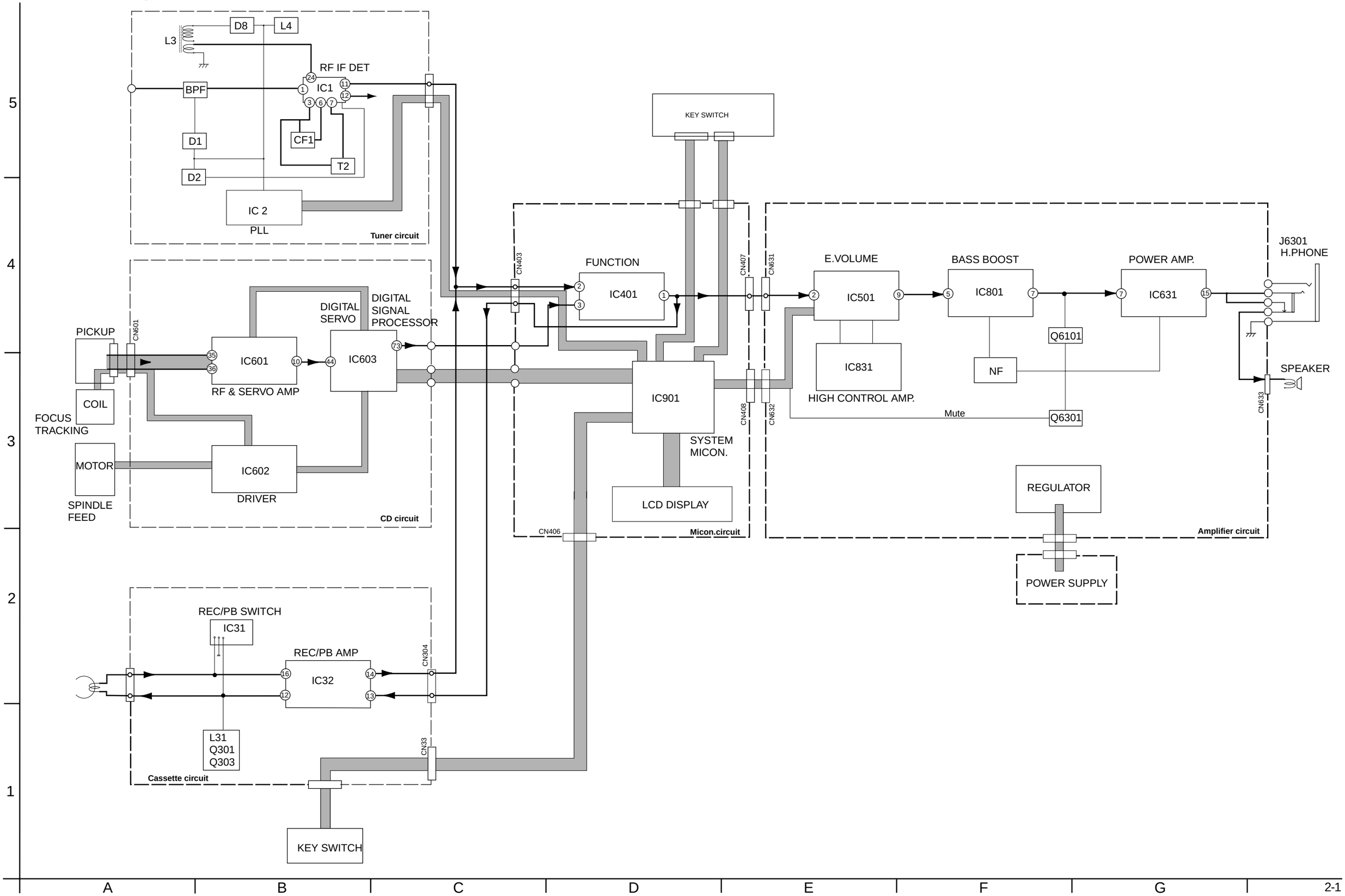
⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	P 1	QPA01202505	POLY BAG	1	FOR POWER CORD	
	P 2	QPA02503503P	POLY BAG	1	FOR INST	
	P 3	QPC09006015P	POLY BAG	1	FOR SET	
	P 4	LV32002-002A	CARTON	1		
	P 5	LV10169-002A	BOTTOM(L)	1		
	P 6	LV10169-003A	BOTTOM(R)	1		

■ Parts list(Accsseories)

Block No. M5MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
⚠	A 1	QMPS050-183-JC	POWER CORD	1		
	A 3	LVT0492-008B	INST BOOK	1	ENG SPA CHI	
	A 4	RM-RXVB55E	REMO-CON UNIT	1	RM-RXVB55	
	A 5	----------	BATTERY	2	REMO-CON	
	A 6	LV32051-002A	SHULDER BELT	1	BLUE JVC	

Block diagram



Standard schematic diagrams

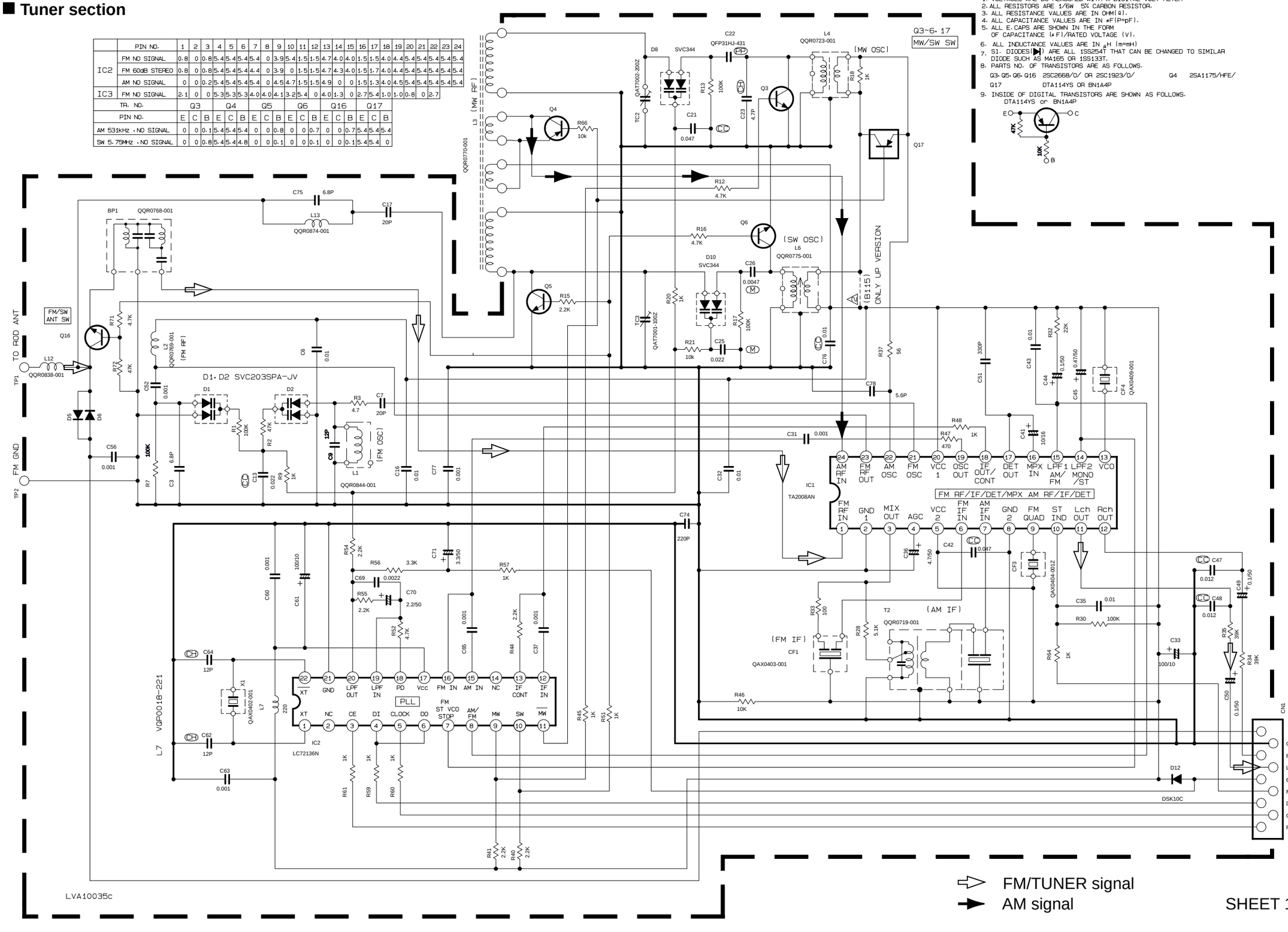
■ Tuner section

	PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
IC2	FM NO SIGNAL	0.8	0	0.8	5.4	5.4	5.4	5.4	0	3.9	5.4	1.5	1.5	4.7	4.0	4.0	1.5	1.5	4.0	4.4	5.4	5.4	5.4	5.4	5.4
	FM 60dB STEREO	0.8	0	0.8	5.4	5.4	5.4	4.4	0	3.9	0	1.5	1.5	4.7	4.3	4.0	1.5	1.7	4.0	4.4	5.4	5.4	5.4	5.4	5.4
	AM NO SIGNAL	0	0	0.2	5.4	5.4	5.4	5.4	0	4.5	4.7	1.5	1.5	4.9	0	0	1.5	1.3	4.0	4.5	5.4	5.4	5.4	5.4	5.4
IC3	FM NO SIGNAL	2.1	0	0	5.3	5.3	5.3	4.0	4.0	4.1	3.2	5.4	0	4.0	1.3	0	2.7	5.4	1.0	1.0	0.8	0	2.7		

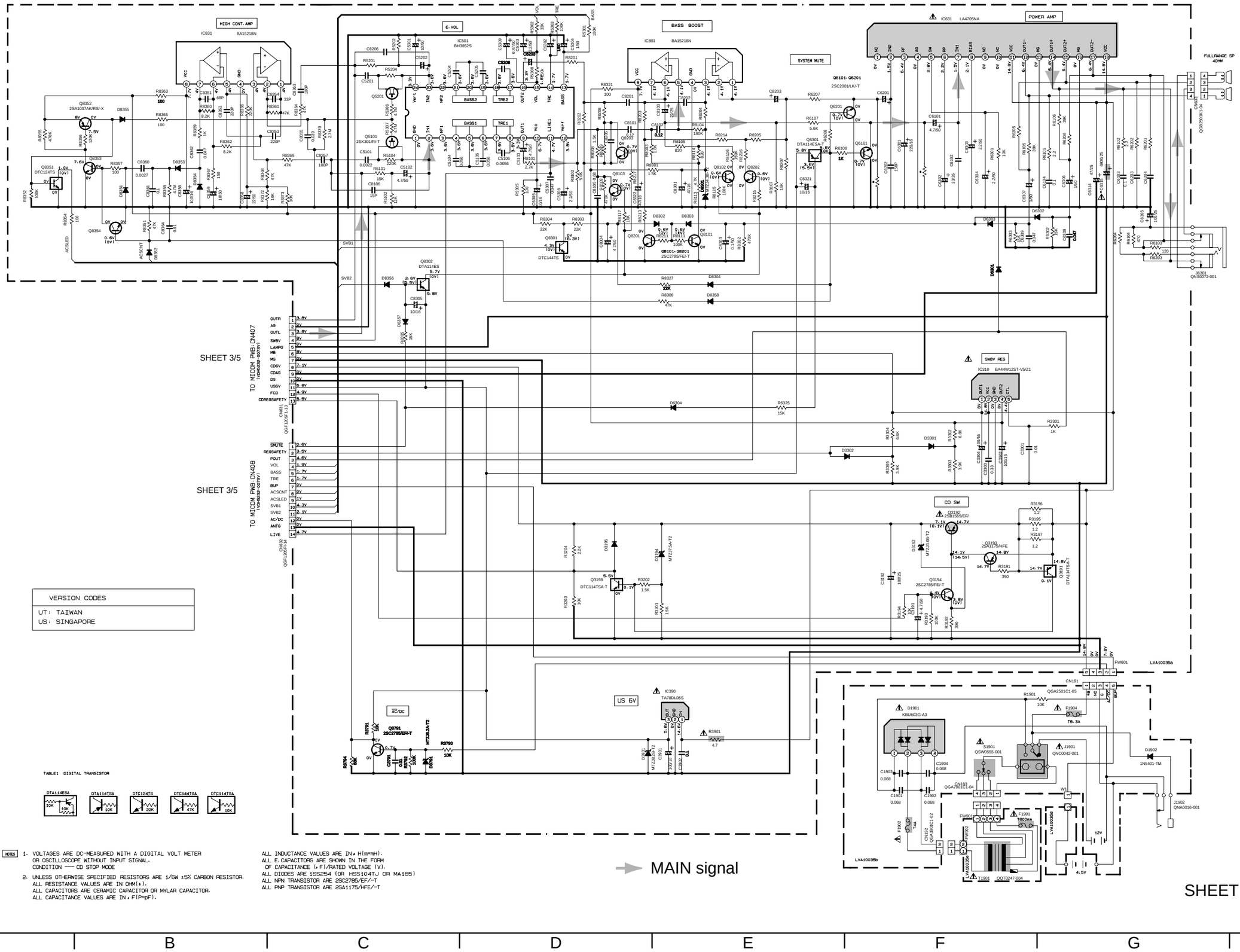
TR. NO.	Q3			Q4			Q5			Q6			Q16			Q17		
PIN NO.	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
AM 531kHz · NO SIGNAL	0	0	0.1	5.4	5.4	5.4	0	0	0.8	0	0	0.7	0	0	0.7	5.4	5.4	5.4
SW 5.75MHz · NO SIGNAL	0	0	0.8	5.4	5.4	4.8	0	0	0.1	0	0	0.1	0	0	0.1	5.4	5.4	0

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER
2. ALL RESISTORS ARE 1/6W 5% CARBON RESISTOR.
3. ALL RESISTANCE VALUES ARE IN OHM(Ω).
4. ALL CAPACITANCE VALUES ARE IN μF(P=pF).
5. ALL E.CAPS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
6. ALL INDUCTANCE VALUES ARE IN μH (m=mH)
7. S1. DIODES(▶|) ARE ALL 1SS254T THAT CAN BE CHANGED TO SIMILAR DIODE SUCH AS MA165 OR 1SS133T.
8. PARTS NO. OF TRANSISTORS ARE AS FOLLOWS.
   Q3. Q5. Q6. Q16 2SC2668/O/ OR 2SC1923/O/ Q4 2SA1175/HFE/
   Q17 DTA114YS OR BN1A4P
9. INSIDE OF DIGITAL TRANSISTORS ARE SHOWN AS FOLLOWS.
   DTA114YS or BN1A4P



■ Main amplifier section



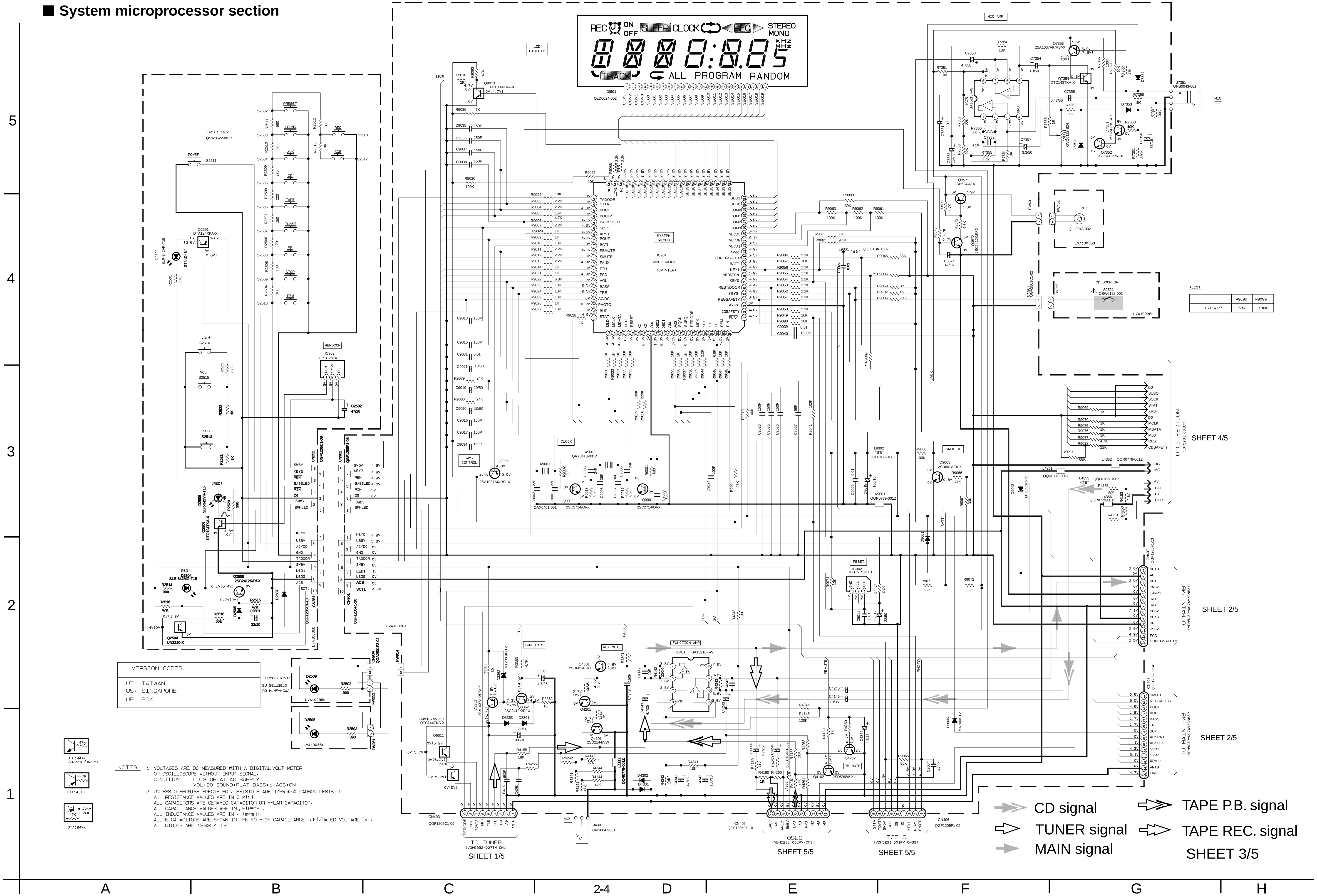
VERSION CODES
UT: TAIWAN
US: SINGAPORE

TABLE1 DIGITAL TRANSISTOR

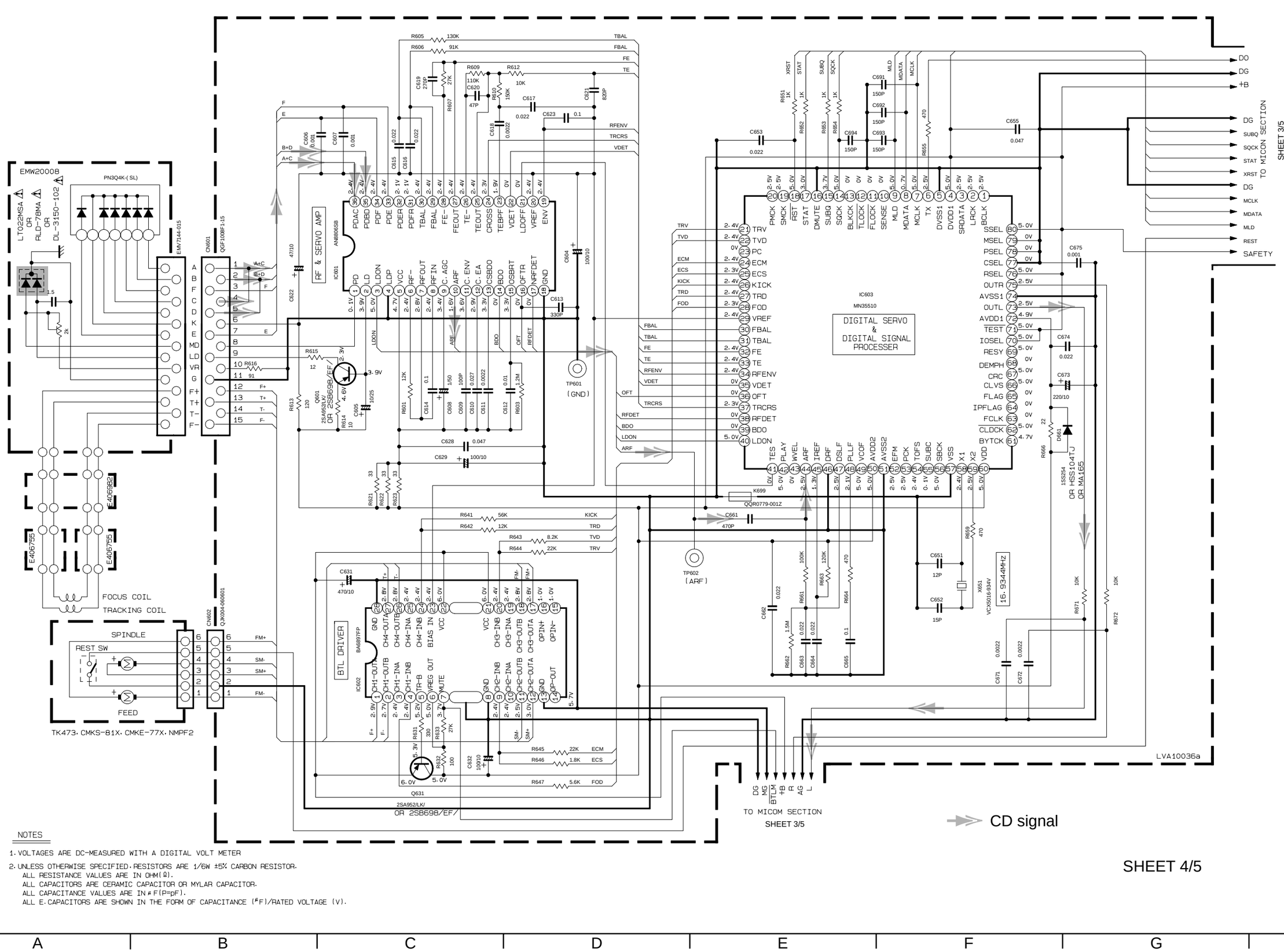
NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. CONDITION ---- CD STOP MODE
2. UNLESS OTHERWISE SPECIFIED RESISTORS ARE 1/6W ±5% CARBON RESISTOR. ALL RESISTANCE VALUES ARE IN OHM(Ω). ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR. ALL CAPACITANCE VALUES ARE IN μF(P=pF).

ALL INDUCTANCE VALUES ARE IN μH(m=mH).
ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
ALL DIODES ARE 1SS254 (OR HSS104TJ OR MA165)
ALL NPN TRANSISTOR ARE 2SC2785/EF/-T
ALL PNP TRANSISTOR ARE 2SA1175/HFE/-T

■ System microprocessor section


LCD DISPLAY
DI901
QLD0024-002
REC ON OFF SLEEP CLOCK REC STEREO MONO kHz MHz TRACK ALL PROGRAM RANDOM
SYSTEM MICON
IC901
MN171603BJ
(TOP VIEW)
MIC AMP
IC751 BA15218F-W
J7351 QNS0043-001
MIC
PL1 QLL0043-002
LVA10036d
CD DOOR SW
S2521 QSW0122-001
LVA10036c
*LIST
S2501~S2513
QSW0622-001Z
POWER
PRESET
SOUND
REC
ACS
AUX
CD
TAPE
TUNER
FF
STOP
REW
VOL+
VOL−
SUB
STAND-BY
REMOCON
IC903 GP1U281X
CLOCK
SW5V CONTROL
BACK UP
RESET
IC902 IC-PST9131-T
TUNER SW
AUX MUTE
FUNCTION AMP
IC401 BA15218F-W
PB MUTE
TO CD SECTION (VDH5231-001CW)
SHEET 4/5
TO MAIN PWB (VDH5232-007AV:CN631)
SHEET 2/5
TO MAIN PWB (VDH5232-007AV:CN632)
SHEET 2/5
CN403 QGF1205C1-09
TO TUNER (VDH5232-007TW:CN1)
SHEET 1/5
AUX
J4301 QNS0047-001
CN405 QGF1205F1-10
TOSLC (VDH5231-001PV:CN34)
SHEET 5/5
CN406 QGF1205F1-09
TOSLC (VDH5231-001PV:CN33)
SHEET 5/5
CD signal
TUNER signal
MAIN signal
TAPE P.B. signal
TAPE REC. signal
SHEET 3/5
VERSION CODES
UT: TAIWAN
US: SINGAPORE
UP: ROK
D2508, D2509
BU SELU2E10
RD HLMF-KG02
LVA10036a
LVA10036b
LVA10036e
LVA10036f
DTC144TK /UN2210/UN2216
DTA143TK
DTA124XK
NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
CONDITION --- CD STOP AT AC SUPPLY
VOL:20 SOUND:FLAT BASS:1 ACS:ON
2. UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/6W ±5% CARBON RESISTOR.
ALL RESISTANCE VALUES ARE IN OHM(Ω).
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN μF(P=pF).
ALL INDUCTANCE VALUES ARE IN μH(m=mH).
ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
ALL DIODES ARE 1SS254-T2
A B C 2-4 D E F G H
5 4 3 2 1

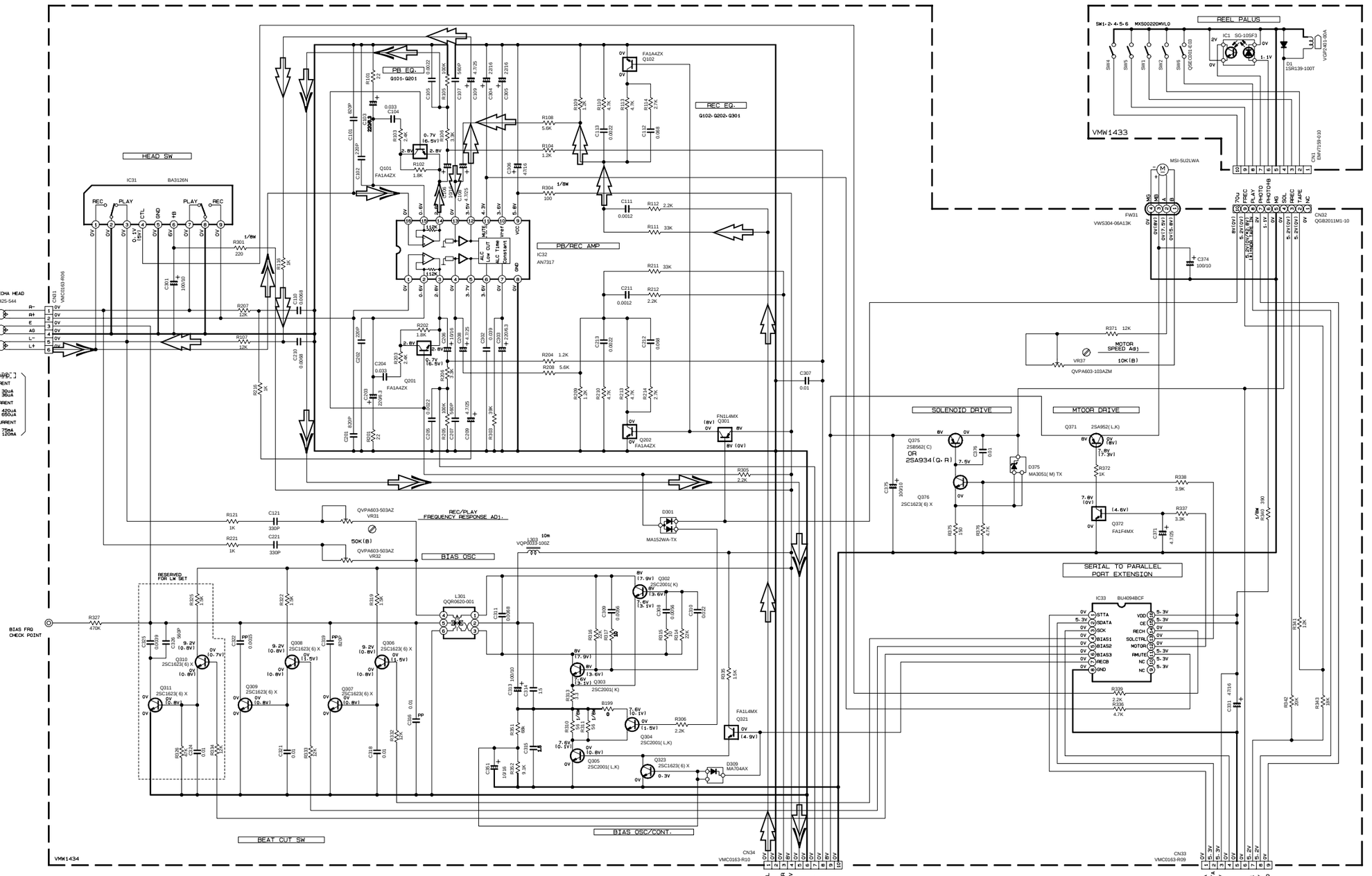
■ CD servo section



NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER
2. UNLESS OTHERWISE SPECIFIED. RESISTORS ARE 1/6W ±5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).

■ Cassette amplifier section



NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION : MECHA STOP MODE

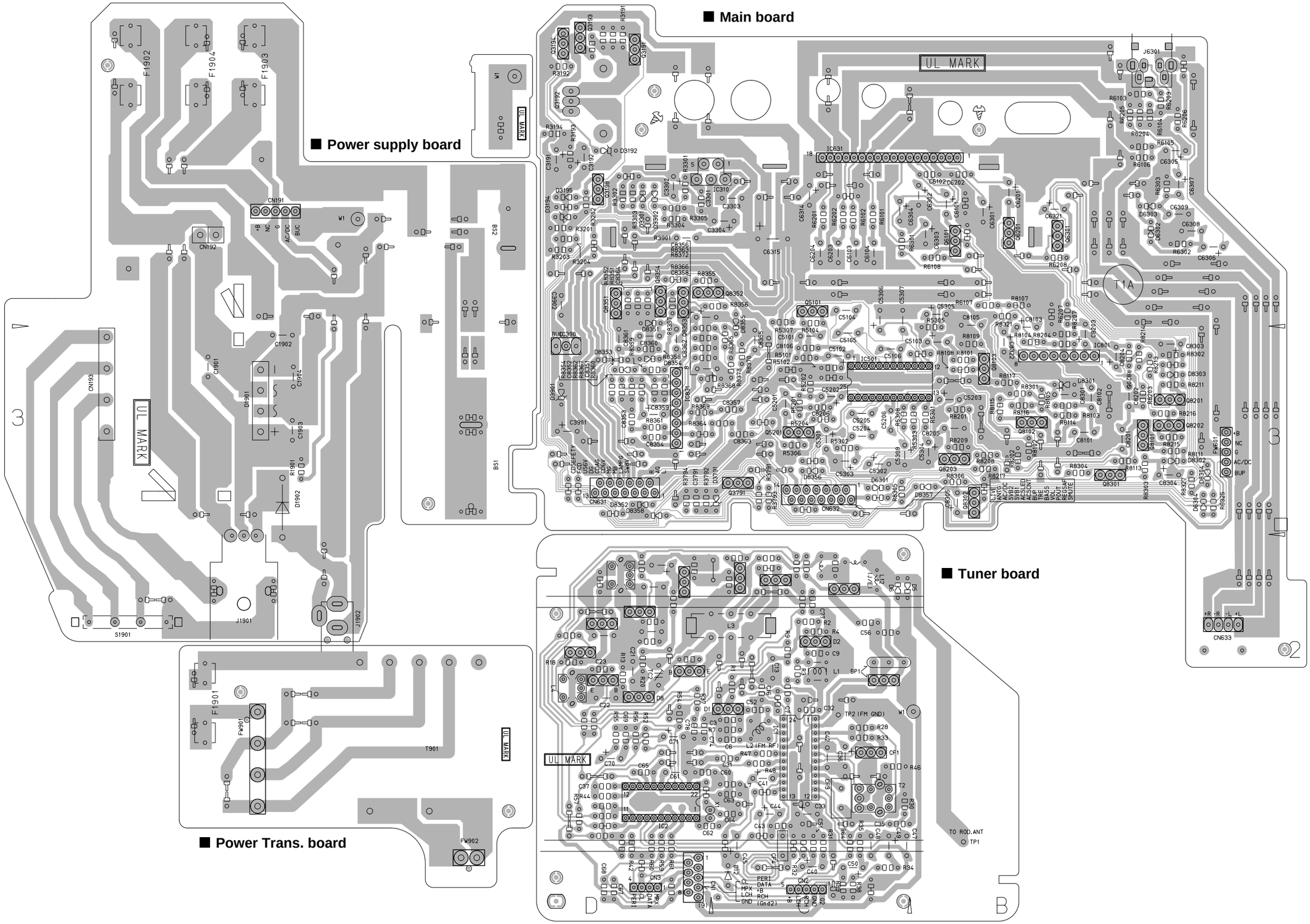
2. UNLESS OTHERWISE SPECIFIED · RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(p=pF).
   ALL INDUCTANCE VALUES ARE IN μH(m=mH).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE / μF)/RATED VOLTAGE (V).
   POLYPROPYLENE CAPACITOR

PARTS	NAME	REF.NO
	FA1A4ZX	Q101·Q201 Q102·Q202
	FN1L4MX	Q301
	FA1L4MX	Q321
	FA1F4MX	Q371

TAPE P.B. signal
TAPE REC. signal

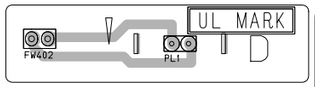
Printed circuit boards

■ Main board

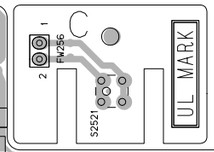


■ SYSTEM CONTROL BOARD Block No. 0 1

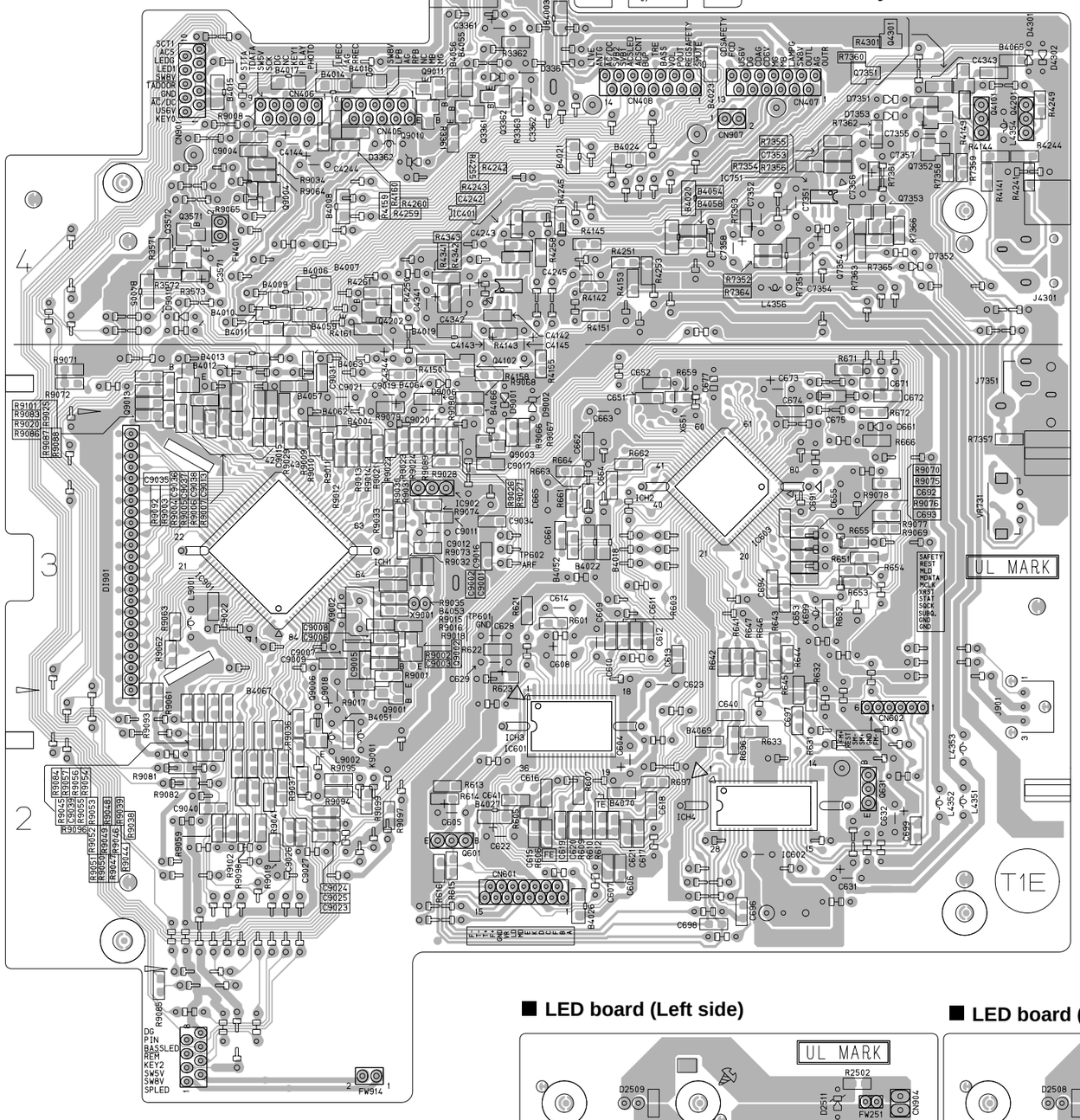
■ Lamp board



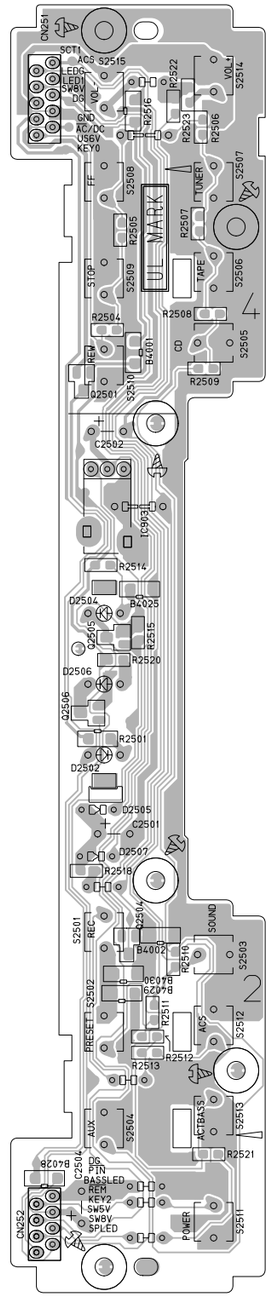
■ CD Door switch board



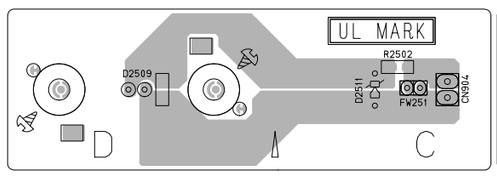
■ System control board



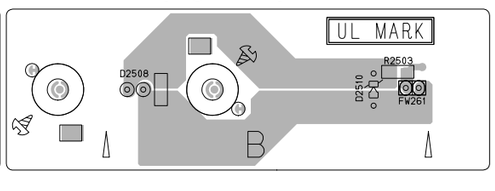
■ Key switch board



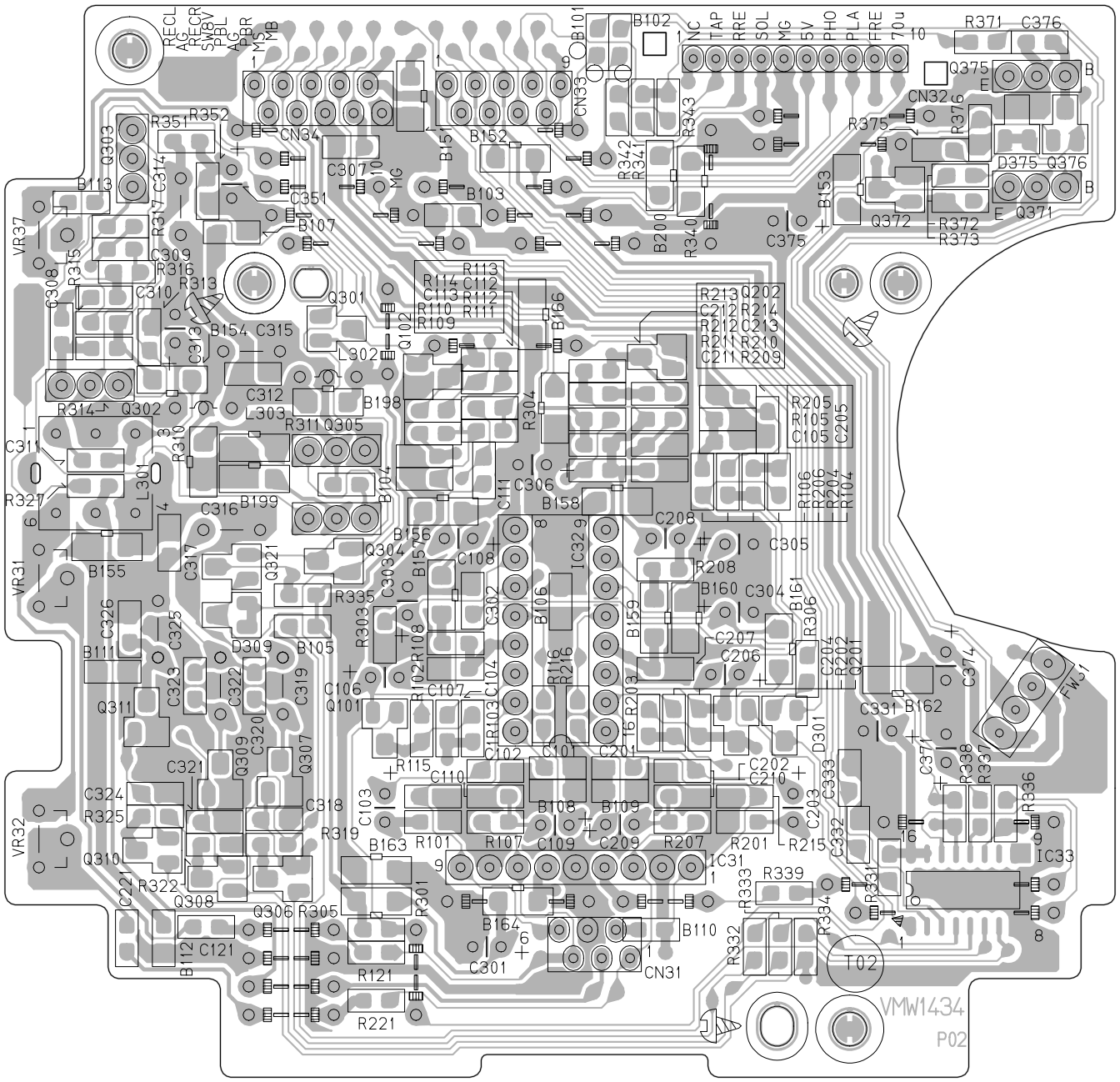
■ LED board (Left side)



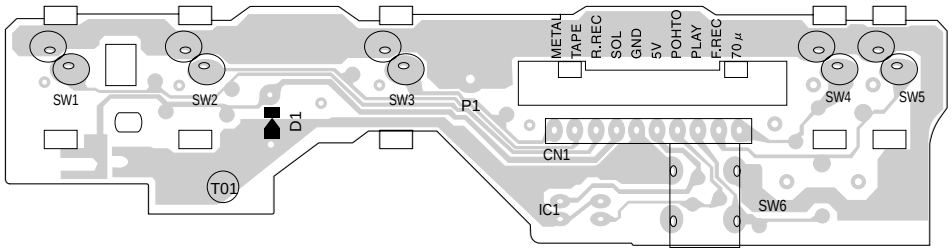
■ LED board (Right side)



■ Head amplifier & mechanism board



■ Cassette switch board



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